

Park Development



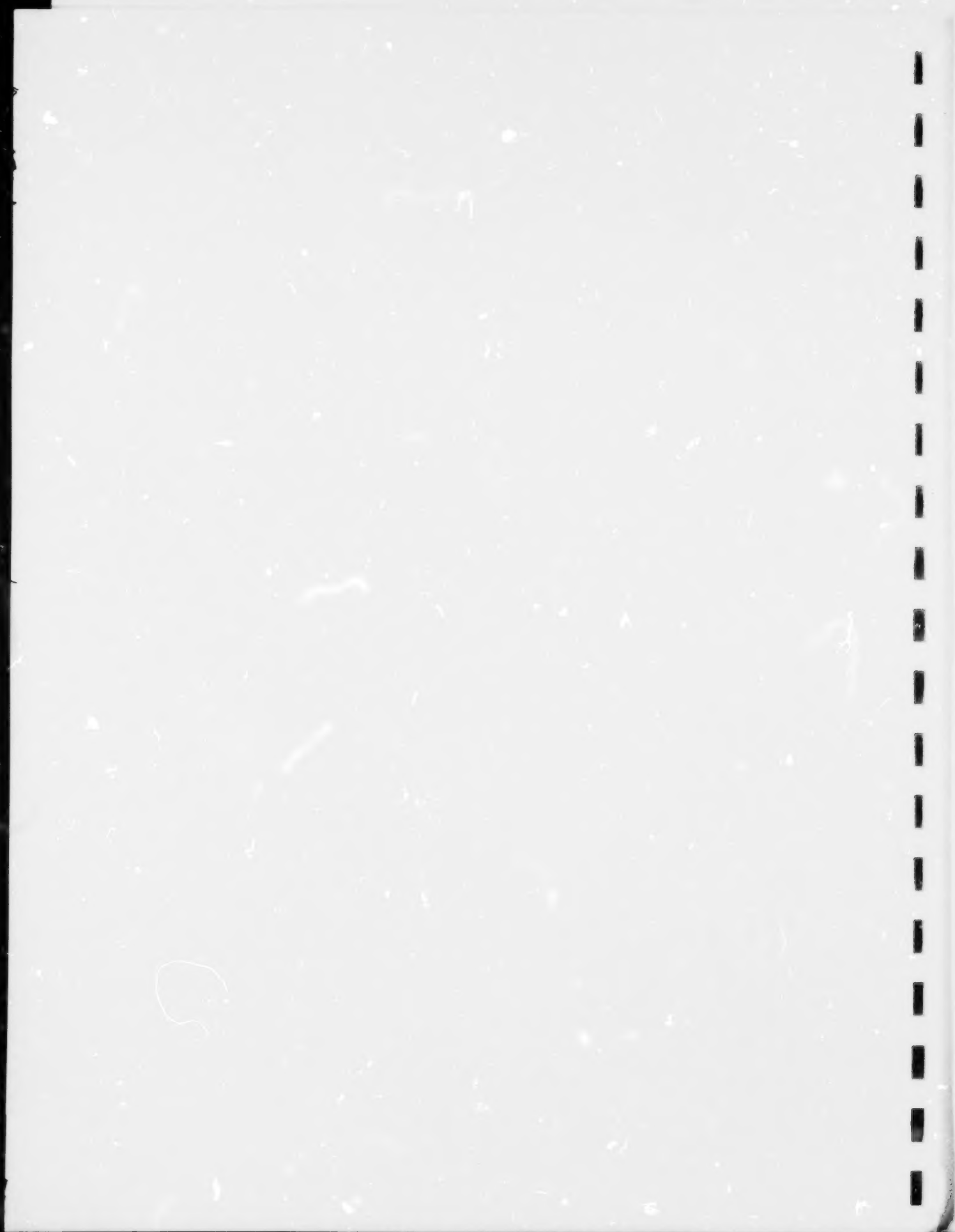
Alberta

RECREATION AND PARKS
Recreation Development Division

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In plain English, this manual provides the public with a wide variety of park development ideas. None of the drawings are intended for construction purposes. The designs come from various sources and do not represent Alberta Government standards.



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INTRODUCTION



Taking it Easy

Parks are places for people, places for relaxation and outdoor activities, for socializing and solitude. They offer a break from our work-a-day world.

More and more communities are building parks ... or rebuilding those which are a little worn out and need to be rejuvenated.

But where do you start? How do you get from a good idea to a completed park? How do you build for the wide-ranging needs of the whole community: young and old, families and groups, and people with special needs?

Help

There are several good campground development manuals used by government parks agencies across Canada. However very few communities build just a campground. Most community-run parks include a variety of development. They often have a campground and a picnic area with roads, parking areas, trails and basic visitor services, such as drinking water supplies and toilets.

This is a park development manual with a difference. It looks at the broad range of park development needs through the eyes of a community group.

What You'll Find in This Manual ... and What You Won't

This manual is a do-it-yourself guide for people with varied skills building a park for the first time. Part I provides information on getting organized, lining up support, and planning a park.

Part II provides specific information on park design and on the construction of a variety of park facilities.

The SOURCES section at the back of the manual will point you in other helpful directions.

This manual does not cover park operation beyond pointing out some key areas where this must be considered during the planning and design stages. A basic principle of this manual is that park operation and maintenance should be considered from the very beginning

of the park project - not as an afterthought. Please consult other sources for information on park operation and maintenance.

Also, check the back cover of this manual for other useful FOCUS SERIES publications.

Be Particular

A popular misconception about parks is that there is one, and only one, best standard of development. But a successful plan from one park cannot be used cookie-cutter fashion to build any park, anywhere.

So start with two ideas in mind:

- . Your park will be a unique place built to serve the particular needs of your community.
- . Shop around and see what others have done, but develop your own park *from the ground up*.

By the way, if you've never spent a few nights camping or enjoyed a spur-of-the-moment picnic or a visit to a park in the winter, read no further. Drop everything and go! Your own experience will be your most useful guide.

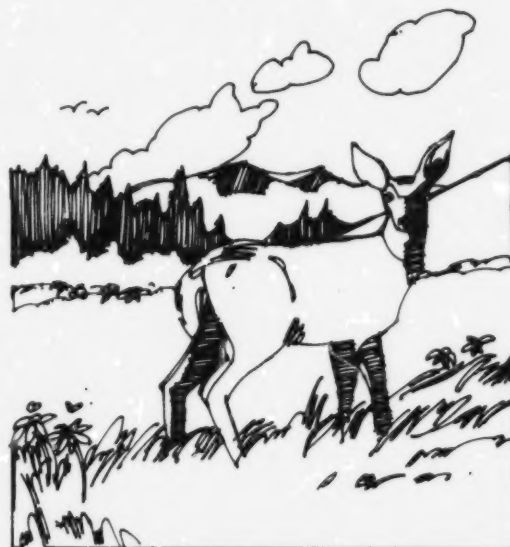
Act Naturally

Most parks are a happy marriage between people and the environment. It will be a challenge to develop and use your park without harming the natural qualities that make it an attractive place.

You must carefully judge the use the park environment can withstand

without damage. The amount of use, the type of use, and where activities will take place on the site are very important factors to be considered.

Plan ahead to protect your park's natural diversity of plant and animal species. If the park site has lost these natural features, consider reclaiming some of them.



PHASE I: ORGANIZATION

The Action Plan

Have a plan of action in mind as you start your park development project. A complicated task becomes simpler if you break it into smaller parts and do them one at a time.

Write up a one-page action plan, organizing the main parts of your project in the order they will have to be done. Highlight points at which major decisions must be made before the project proceeds. Use common sense and be realistic.

The action plan will help you to organize your ideas and show others what you want to do and how you propose doing it. It demonstrates forethought and lends credibility to your project.

A three-phase action plan is recommended:

1. Organization Phase
2. Planning Phase
3. Development Phase

In the organization phase you will form a park committee and establish the feasibility of the project. Is it a worthwhile project? Who will be involved? Where will you get support?

The planning phase will answer the following questions:

- . What type of park will be developed?
- . Where will it be located?

- . How will it be built and operated; with what money and by whom?

At the end of the planning phase you will have a concept plan and enough information to write a park proposal suitable for fund raising and for public presentation.

The development phase includes all final planning and design decisions, detailed budgeting and scheduling, and the obtaining of all agreements, approvals and contract agreements. And, of course, construction.

WHY PLAN?

- . It's a way of considering a wide range of ideas and then selecting the 'best' solution.
- . It's a way of breaking a big complex job up into more manageable pieces.
- . It's a way of explaining to others what you want to do and how you are going to do it.
- . The plan matches recreational uses with site capabilities.
- . A plan is a necessary part of almost all grant applications, development approvals and land leases.
- . The plan will be used to schedule the tasks in the order in which they have to be done.
- . A plan is required to get the most efficient use out of the resources available.

1. ORGANIZE

SET UP COMMITTEE
MAKE AN ACTION PLAN
WRITE A PROJECT STATEMENT
ESTABLISH FEASIBILITY

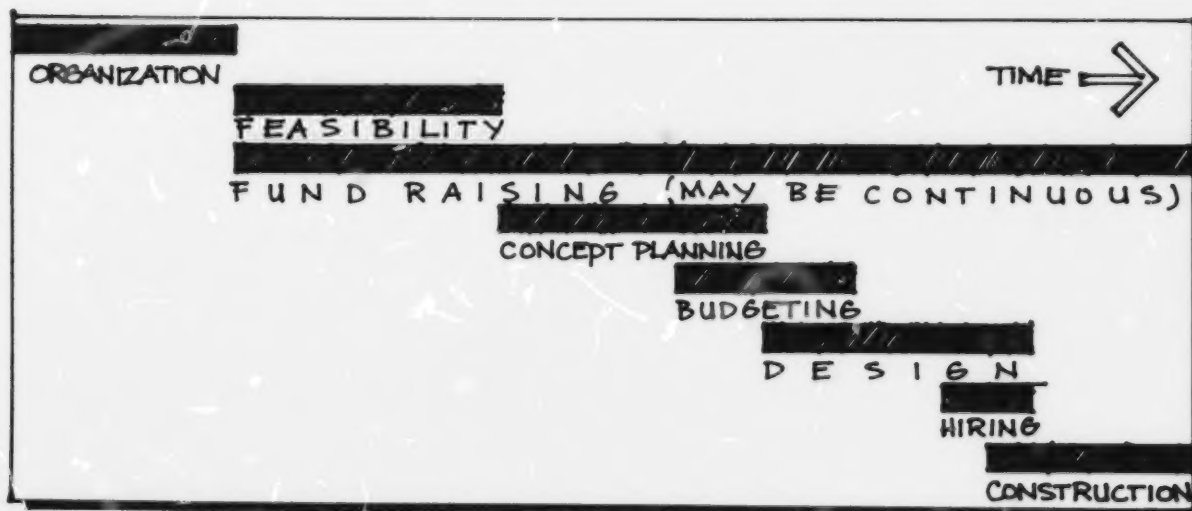
2. PLAN

EVALUATE REGIONAL SETTING
SITE SELECTION
RAISE SUPPORT
IDENTIFY NEEDS
SITE ANALYSIS
CONCEPT PLAN
(PUBLIC MEETING)
COST ESTIMATING
PARK PROPOSAL

3. DEVELOP

DEVELOPMENT PLAN
PROJECT MANAGEMENT METHOD
HIRING
DESIGN
CONSTRUCTION

ORGANIZE YOUR TASKS INTO AN ACTION PLAN.



PROJECT SCHEDULING — SOME PHASES CAN OVERLAP, OTHERS CAN'T.

Getting Organized

Developing a park is a complicated, time-consuming and sometimes frustrating business. You'll have to pick a site, weigh everyone's needs, determine what type of development the site can withstand, line up all necessary permits and approvals, do a plan, hire contractors, keep books, and so on.

Got the message? Don't try it alone!

Even from the beginning, two heads are better than one. Form a committee of from 3 to 10 people with real enthusiasm for the project. You'll soon find out two things:

- . Two people working together can come up with good ideas that neither of them would have thought of on their own.
- . Your best *experts* will be those people sitting around your park committee table.

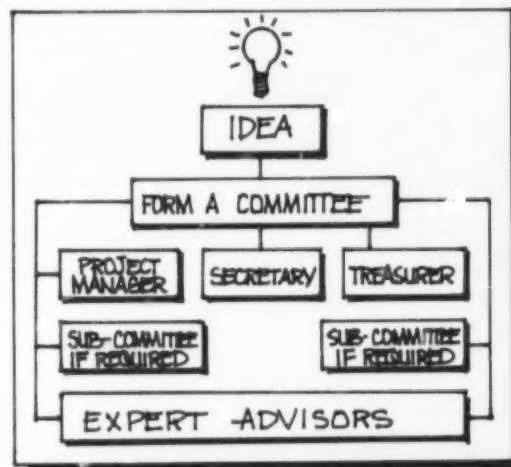
Try to put together a committee of people with a variety of skills and experience. Your project has a better chance of success if the committee is representative of the community.

Skills in the following will be especially useful:

- . fund raising
- . construction and utilities
- . contracting and project management
- . agriculture and landscaping
- . insurance and legal advice

- . accounting and secretarial work
- . heavy equipment operation
- . municipal administration

Keep the committee to a workable size and strive for consensus. The team approach from the beginning will keep up project momentum, spread out the workload, and keep volunteers from *burning out*.



GET ORGANIZED.

Ten Tremendous Tips

Here are some suggestions on how to have effective meetings and run a successful organization:

- . Elect a project manager to chair the meetings and represent the group. The project manager should be a good organizer who can delegate jobs. Look for a go-getter who won't do all the work themselves. Elect a secretary and treasurer.

- . Consider registering as a non-profit society. This status may be required eventually. Obtain legal advice and choose a form of incorporation that ensures all members freedom from legal liability.
- . Provide an agenda ahead of time and make sure that everyone knows why they are there.
- . Make sure everyone at the meeting gets a say, and try to stick to the subject.
- . Set out to accomplish three or four things at each meeting. Go over what you have accomplished at the end of each meeting and agree on what things will be tackled next.
- . Record the tasks to be accomplished and who will be responsible for doing them.
- . Call meetings at regular intervals in keeping with the pace of the project.
- . Introduce invited guests at the beginning of each meeting.
- . Keep track of all meeting and project costs from the beginning. There may be an opportunity for reimbursement or an honorarium later.
- . Never leave a meeting without knowing when the next one will be held.

Regional recreation staff can assist your group in setting up and running effective meetings.

REASONS FOR INCORPORATING

- . Incorporation gives a greater sense of credibility and stability.
- . An individual member of an incorporated organization cannot be held legally responsible for debts or liability incurred by the organization.
- . An incorporated organization can hold title to property or hand out contracts in its own name.
- . Tax exemption benefits.
- . Incorporation is usually required by grant administering agency.

An Overall Approach

In organizing the project, as well as in running your meetings, work from the general to the specific. Try not to jump too far ahead, too fast. It may be tempting to go shopping for picnic tables long before agreeing on more basic aspects of the park. But how can you buy tables when you don't know what kind of use they'll receive? Should they be anchored to the ground or portable? wood topped or cement? handicapped adapted? Many planning factors go into making even small scale decisions.

Individuals with a lot of detailed information and with specific interests can be tied into the project at a later date, when their energy will be most helpful.

And remember - calm, steady patience is often better than sudden pressure to get things done overnight.

·MINUTES·

COMMITTEE NAME:

MEETING NUMBER:

DATE:

LOCATION:

PRESENT:

ABSENT:

DISCUSSION:

DECISIONS &
RESPONSIBILITY
FOR ACTION:

The Heart of the Matter

A good place to start on a park development project is to sit down and write a one paragraph statement about what you want to do.

Sound easy? It may take a while for your committee to agree upon what is needed, who will do it, for whom, and for what reason.

Try for a statement such as:

"Community X will develop and operate a park at Y Beach for use by daytime and overnight visitors from the surrounding area, and to serve as an attraction for the travelling public."

A statement like this will get everyone on the same wavelength and will be a good starting point for determining whether or not your idea is feasible.

Can It Be Done?

Asking tough, basic questions at the beginning of the project will pay dividends later on. You may have a great idea but no way to finance it. Or, you may have a project in mind but find out the preferred site isn't available.

Determine whether or not your project is feasible before moving into the planning phase. Your preliminary homework will tell you more about the market, your product and the competition.

Answering the following questions will help establish project feasibility and avoid unwelcome surprises later:

- . Who will use the park: how many, from where, during what seasons?
- . How will the park be used: for camping, picnicking, group use?
- . Are similar parks available in the area? Is anything else being planned that will have an impact on the project?
- . Is the preferred site really available?
- . How will planning, development and operation be financed?
- . Who will be responsible for the park?
- . Who should be involved: community movers and shakers, municipal authorities, local club representatives?

These questions will also point out what you have to work at next. A vague answer about financing means that you will have to work hard at obtaining financial support. Uncertainty about site availability may mean that a legal title search or survey will be required, or that alternative sites must be considered.

And, it's never too early to begin asking questions about the future of the park. Always build a park knowing how it will be operated and maintained.

With answers to these questions, you will be able to move into the planning phase of the action plan. You may want to hold a public meeting to air your ideas. Other members of the community will appreciate an early chance to find out about the project, to lend their support to your plan, and to contribute their ideas for consideration.

PHASE II: PLANNING

Getting Started

Several things can begin at once as you start the planning phase. You will want to know more about the regional recreational setting and about alternate sites that may be available. You will also want to start fund raising immediately. Any plans you have depend on the timing and availability of that all-important financing.

Consider forming sub-committees: one to work on land-related concerns, and another to start identifying sources of assistance. The sub-committees should report back to the whole committee at regular intervals.

Evaluate Recreational Setting

Before planning your park, check out the competition. A highway map and the provincial accommodation or campground guide can be used to note the location of nearby parks. You should be asking the following questions:

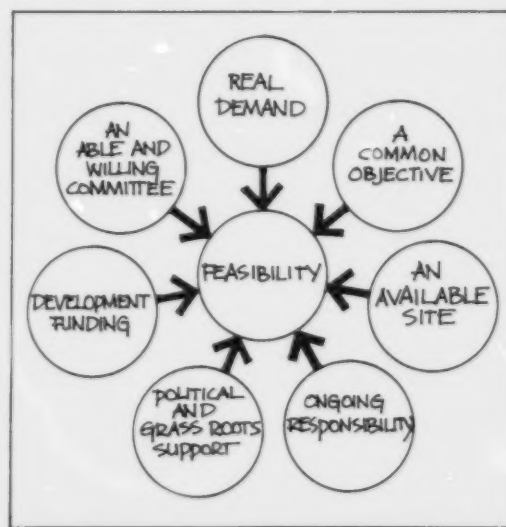
- . Do nearby parks duplicate what we want to do?
- . Who uses these parks and how crowded are they?
- . What can we learn from other parks?

You may find some interesting answers. Visit nearby parks and interview local park managers. They will form a valuable network for future help and information sharing.

Evaluating the regional recreational setting will bring your own project into better focus. Learn from others' mistakes and capitalize on their successes.

Also ensure that your park project fits into community recreation and open space master plans. The local recreation board will be able to show you how your project fits into the overall recreation picture.

Optional undeveloped sites should also be evaluated. Is the site you already have in mind the best site? Better sites may be available for purchase, lease or donation. Non-profit societies can lease public land at very low cost. Make sure your land disposition information is the most recent - county maps can be very out of date.



IS THE PROJECT FEASIBLE?

Watch for any opportunity to redevelop and operate an existing park.

Land administering government agencies such as forestry, lands, environment and agriculture could help your group evaluate optional park sites.

Site Selection

If you are lucky enough to have a variety of sites to choose from, consider the following:

- . Is the site available for long-term public use?
- . Is the site in good condition or will expensive site rehabilitation be required?
- . How is road access to the site? Will existing on-site roads have to be removed? Who will pay for access road development costs?
- . Are adjacent land users agreeable to the proposed park development?
- . Will the proposed use fit with local regulations and land use zoning?
- . Is the site big enough? Is there room for expansion at a later date?
- . Generally, is the site suited to the type of development proposed?
- . What long-term factors (subdivisions, roads, flooding, etc.) will influence the site in the future?

Knocking On Doors

You can have the best park site and wonderful plans for it, but without support your project may never get off the ground. Getting support requires planning and effort.

Three kinds of support are required:

- . Moral support
- . Financial support
- . Labour

Moral Support

Moral support lets someone back your project without necessarily committing time or money.

A letter of support and encouragement from local or provincially-elected representatives can give your project credibility, and may have a snowball effect in gaining additional support. High profile moral support may also influence other decision-makers.

Support of a local government council can be expressed as an adopted resolution or *minute* of their official proceedings. Arrange to be placed on the agenda to make a park project presentation. You will be taken more seriously if you are well-organized and present ideas that have been carefully thought out in advance. This is where your preliminary work and project statement can really pay off.

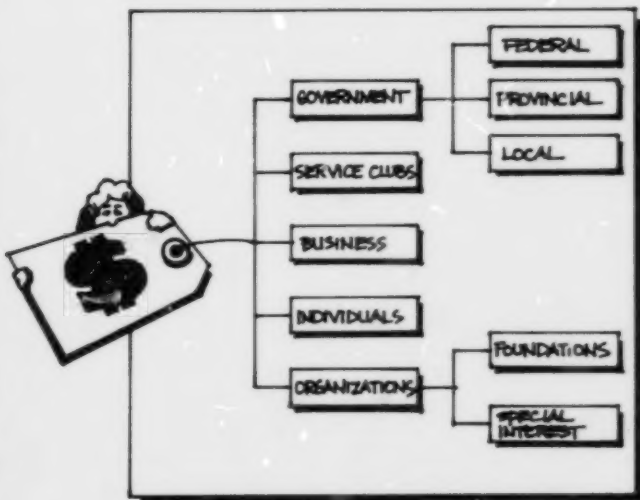
Keep your supporters informed as the project progresses. Update them periodically. Don't swamp them with requests. And remember to invite them to official sod turnings and opening day ceremonies.

Financial Support

Parks are expensive. Just having moral support won't pay the bills. Even with massive volunteer help, you are still going to need to buy materials, pay construction costs, and operate the park once it's open.

Financial assistance will take time to cultivate, so start looking early. Be exhaustive (it can be!) and leave no stone unturned.

A word to the wise: by far your biggest investment will be in operating and maintaining the park, not in building it. Operating assistance can be hard to come by, and the need for it will never go away. Be sure the park will have the support it needs once it's open.



THERE ARE LOTS OF FUNDING SOURCES.

Where to Start

This chart shows the main categories of financial assistance for park development projects. Use the chart like a map, making sure to follow up all the side roads you discover. Let's take a closer look at each category.

1. Government

Federal and provincial government grants are a major source of financial assistance. Help may also be available through local government councils.

Labour or wage subsidy grants are more common than capital development grants. Be on the lookout for anything you can get, or are eligible for, as most projects will require more than one grant.

For example, a student employment grant may be available locally, a labour grant federally, and a capital development grant available provincially.

Most government grants have application deadlines, eligibility requirements, and strict guidelines concerning financial accountability. You must respect these. Public funds must be very carefully administered.

The timing of grant cheques and labour assistance will have to be matched to your construction schedule.

No one source lists all the grants available. They change from year to year. For a start: phone Employment and Immigration Canada; consult the current edition of

Alberta Municipal Assistance Programs (described in the SOURCES section at the back of this manual); and brainstorm with your regional recreation consultant.

Be wide ranging in making government contacts. Don't forget agencies such as the Prairie Farm Rehabilitation Administration and Irrigation Districts.



2. Service Clubs

Service clubs are the prime movers in many park development projects, and some clubs make major contributions to community-oriented projects undertaken by others. Service club financial assistance usually includes valuable volunteer labour to back it up.

Chances are pretty good that a service club member is already sitting on your park committee. If not, think of approaching a club to have one of their members participate in your project.

Contact local service clubs in the early stages of the project. You may find that they are thinking along the same lines, and that you can pool your resources.

Try to identify a part of your project that can be adopted by a club: a picnic shelter or playground for example. This will enable the club to focus in on one easily identifiable aspect of the overall project. They may also have expertise in this one area. The part the club is responsible for must, however, be well integrated into the overall park design.

Remember to give credit to the clubs that have helped by including them on a commemorative plaque or park entrance sign.

Here is a short list of some service clubs with a long-standing record of participating in park development projects.

- . Kinsmen/Kinettes
- . Royal Canadian Legion
- . Lion's Club
- . Elks Club
- . 4-H Club
- . Knights of Columbus
- . District Agricultural Societies

Several clubs active in your community may not be listed - don't forget to approach them with your ideas.

3. Business

Businesses, big and small, are usually well aware of their community service role and many will jump at the chance to make a small but visible contribution to your park development project.

The two keys to getting business help are size and visibility. Businesses may be willing to help in a small way by footing the bill for a park sign, for a flagpole, or for a dozen picnic tables. They will appreciate the public relations benefits from any recognition you can give them.

Business is a major partner in almost every community. Local branches of larger national companies may have access to additional funds for public relations purposes. Companies with land and operations adjoining the proposed park development are especially good candidates for providing financial support.

Make a list of the most likely business supporters in your area. Book an appointment with the appropriate official and go into your meeting well-organized. Keep your pitch brief and to the point. Tell them who you represent, what you want to do, what backing you already have, what your needs are, and how they can help you. Point out how profitable their contribution will be.

An initially-favourable but non-committal response can be followed up later in the design stage, when costs have been broken down and budgets finalized. A specific written commitment for a particular aspect of the project can then be obtained.

4. Individuals

Donations and fund-raisers are two ways of getting financial support from the public. Donations may be small and numerous, part of an estate, or a single donation made

to help reduce taxable income. In cases of large donations of funds or land, make sure both parties have received legal advice.

Fund-raisers are a popular way to have the community-at-large express their support for a park development project. Some ideas:

- . Bake sales
- . Gaming (bingos, casinos, raffles)
- . Entertainment
- . Services (e.g., carwashes)
- . Sports events

Fund-raising events take a lot of work and may involve risks like getting rained out. Carefully weigh the costs of putting on a fund-raiser to make sure you come out on top.

A school, youth organization or seniors group could adopt your project and host a fund-raiser on your behalf.

Selling club memberships or shares are two other ways of raising money. The terms of agreement must be clearly spelled out to each member or shareholder. Seek legal advice to avoid potential pitfalls with this method. Clubs and shares may mean limitations on public use.

Get the media involved so that your fund-raiser also raises your profile. Be innovative. Steal good ideas! And remember, the main reason people give support is because they were asked.

5. Organizations

There are lots of non-government organizations with a surprising potential for providing financial support to park development

projects. The larger ones are similar to government agencies, with funding regulations, eligibility requirements and grant applications. Some even have their own bureaucracy!

When approaching an organization make sure your request falls within that organization's mandate. A preliminary contact can be established by inviting a representative of the organization to address your meeting.

As with some government grants, funds from organizations may require a matching contribution of equal value from the community or group involved. Most have several grant application deadlines during the year. Any previous track record, evidence of community backing, and a strong showing of volunteer commitment are very helpful in obtaining this type of support.

The following list shows some of the foundations and special interest organizations actively involved in Alberta park development projects:

- . Recreation, Parks and Wildlife Foundation
- . Wild Rose Foundation
- . Ducks Unlimited
- . Trout Unlimited
- . Buck for Wildlife
- . Fish and Game Clubs and Associations
- . Alberta Historical Resources Foundation



When making inquiries be sure to:

- . Obtain the most recent information. Government grants change from year to year.
- . Make a list of the questions you're going to ask.
- . Get the name, phone number and address of the persons you talk to.
- . Take lots of notes.
- . Ask that detailed grant information be mailed to you as a follow-up to your call.
- . Ask the person on *the other end* if they have any other useful suggestions or leads.

WHAT WENT WRONG?

Here are some reasons why a granting agency or foundation might not fund an application:

- . The group or project does not fit within that agency's area of responsibility.
- . The application is incomplete.
- . The application is late.
- . The group is not incorporated under the Societies Act.
- . All grant monies for that fiscal year have been paid out.
- . It is evident that the group has had difficulties, or is not capable of undertaking the project.
- . The application is inconsistent (e.g., something in the plan is not accounted for in the budget).
- . The completed project will exclude the general public.
- . Previous grants have not been accounted for.

Indirect Financial Support

Supporters unable to give direct financial assistance to your project may still be able to help in some very important ways. This help can result in considerable cost savings. Here are some ideas:

- . Surplus: Government Departments administering parks occasionally have surplus materials available

for donation or sale at bargain prices. Toilets, tables, stoves, picnic shelters, equipment, and even concession buildings may be disposed of this way.

Surplus items may involve delivery charges and refurbishing costs. Some items may be declared surplus because they are of poor design. Look around and be choosy.

To find out about surplus, contact individual park-related agencies and the department responsible for public works, supply and services.

- . Discounts: Make the rounds of local businesses to see what kinds of deals they will give you for using them as a supplier during the construction and operating phases of the project. You will find many businesses willing to give cut rates and free delivery. Some may include you in their wholesale order for all sorts of construction materials, such as: tools, lumber, bricks, cement, shingles and fuel.

Local construction equipment operators can be approached to donate labour or equipment operating costs.

- . Bulk: Become aware of what others are doing as you investigate regional outdoor recreational developments. Consider purchasing materials and services collectively with other nearby communities to take advantage of a bulk order discount.

Individual campstoves, selling at one price, may be had at considerable savings if ordered in larger quantities. In other words, seek ways to lower your per unit costs. Pool your purchases.

Timing is important when placing a collective order. Be sure of what you need before buying. Don't get ahead of your plans.

Schoolwork: Approach local schools to see how they can be tied in to your project. Drafting classes can take a design and produce a specifications sheet and blueprint. Shop classes can fabricate all sorts of park site furnishings. Vocational schools might assist you through their surveying and heavy equipment classes. Have a school adopt your park as a class project. What better way to make education a relevant, *real-life* experience.

School projects require close supervision and tight quality control. Designs, materials and finishes should be approved by your park committee before work begins.

Pilot Projects: In some cases you may be able to negotiate a lower price with a commercial supplier in return for giving their product increased exposure in a new market area. Deals are more likely to be made with suppliers of speciality items such as playground equipment, floating docks, innovative toilets and pre-fabricated building systems.

Spillover: Try to take advantage of spillover assistance from other nearby projects. Informal arrangements can sometimes be made with crews already working in your area. Look for:

- . survey crews
- . gravel hauls
- . power line work
- . railroad upgrading
- . earth moving projects.



Labour

Building a park takes more than words of encouragement and hard cash. Thousands of hours of labour are required to transform even a modest proposal into reality. Government wage grants and subsidies rarely cover all labour needs. Other labour sources are usually required.

Check with nearby federal and provincial correctional institutions to see if prison work crews are available. These crews include guard supervision, but their work should be carefully directed and monitored by a park committee representative. Prison crews are best used for heavy work such as clearing, brushing, grubbing, raking and spreading.

Many communities have offenders with a community work option as part of their sentence. Their tasks should be related to their work skills. Close supervision or a work partner are recommended.

Schools and youth groups, such as Scouts and Guides, are also potential labour sources. Their involvement should be relevant and tailored to suit curriculum or organization objectives. Think of inviting their help on projects such as:

- . Park site analysis and environmental inventory.
- . Trail planning, layout and construction.
- . Research and writing for interpretive signs and brochures.
- . Tree planting.
- . Helping to make the site and its facilities accessible to the handicapped.

Service clubs, even if they are not able to provide capital dollars, may be a good source of skilled, and dedicated labour.

Seniors and retired people, while perhaps no longer willing to perform strenuous tasks, have considerable energy and experience to draw upon. Think of involving them in:

- . Promotion.
- . Making useful contacts.
- . Organizing and hosting fund-raisers.
- . Babysitting for work parties.
- . Project supervision.
- . Advising your committee.

Many seniors and retired people are involved in park operation and programming but are often overlooked during the planning and construction phases.

Care and Feeding of Volunteers

Volunteers will be one of your most valuable assets. Their time is really worth something. So be ready for them with plans, directions and materials. It should all come together when they arrive on the scene. Sloppy use of volunteers will mean increasing frustration and decreasing enthusiasm.

One of the main reasons people don't volunteer is their fear that tasks may be too demanding. Clearly written *job descriptions* of how volunteers can help will put these fears to rest.

Rewarding volunteers should go beyond a thank-you letter. Think of innovative ways to pay back volunteers and keep up project momentum. Some ideas:

- . special lapel pins
- . season or lifetime passes to park
- . a volunteers-only vacation trip raffle



Think Again

At this point in the planning process it's a good idea to take stock of the project's merits. Is it worth going ahead with, or is it even possible? Have you got support for building the park but no money or people committed to operating it?

Projects can be put on hold until sufficient support is lined up. If you have the support, or the situation looks promising, continue with the next steps in the action plan.

Determining Your Needs

The park site has been selected. After much work, the required support has fallen into place. Preliminary work has given your committee a good perspective on surrounding parks and outdoor recreation use.

Now is the time to decide what you want to do with the site you have, to add flesh and bones to your earlier statement about why you're building the park.

Now is the time to add details on:

- . use
- . scale
- . requirements.

What will the major use and attractions of the park be: a nice beach for picnickers? good fishing for campers? a wayside park for tourists passing through? Will use be year-round?

How about the scale of the development. Will it be a mega-project? How many visitors are expected, during what months and which days? How many campsites will be required, how big a parking lot, and how many toilets will be needed?

Questions of use and scale have to be answered to come up with park development requirements. The list on the next page includes most things typically found in a park. Check off your project's requirements adding special items that might be missing. Note numbers where possible (of campsites, toilets, garbage containers, etc.)

In making this shopping list, arrive at a consensus. Be realistic and keep development plans appropriate to the size and nature of the site. Plan to build for the kinds of use you want to encourage.

If it's useful, consolidate these decisions into a written program-statement. This statement can be incorporated later into a proposal or grant application package. It should be a basic statement of what the main uses of the park will be, and the size and type of development required to support these uses.

In the Ballpark?

It's almost impossible to resist the urge to put a dollar figure on your project now that you have a better idea of what you want to do. If site development is relatively straight forward, a rough budget estimate can be made. In fact, the rough estimate may be so startling that you will be forced to rethink your ideas, to make them a bit more affordable.

Here are three tips in getting rough estimates:

- . Consult government specialists involved in park development projects.
- . Use your network of local park managers to find out what their costs were.
- . Be realistic and be wary of under-estimating.

See a later section for more information on cost estimating.

☒ PARK DEVELOPMENT SHOPPING LIST

- ☐ CAMPEROUND
 - AUTO - ACCESSIBLE
 - GROUP CAMPING
 - WALK IN / BOAT IN

- ☐ PICNIC AREA & PARKING
- ☐ BEACH
- ☐ DOCK
- ☐ BOAT LAUNCH
- ☐ BUOYED SWIM AREA
- ☐ FISH CLEANING STATION
- ☐ BOAT TRAILER PARKING
- ☐ CHANGE HOUSE

- ☐ CONCESSION BUILDING
- ☐ PARK OFFICE / RESIDENCE
- ☐ ENTRANCE STATION
- ☐ FIREWOOD STOCKPILE
- ☐ MAINTENANCE AREA
- ☐ GARAGE

- ☐ TOILETS
- ☐ RV DUMP STATION
- ☐ WATER WELL
- ☐ PICNIC SHELTER
- ☐ PLAYGROUND
- ☐ WASHROOM BUILDING
- ☐ SHOWERS
- ☐ GARBAGE CONTAINERS

- ☐ CAMPSITE HOOK-UPS
 - WATER
 - POWER
 - SEWAGE
- ☐ CAMPSITE MARKER POSTS

- ☐ PARK SIGNS
- ☐ GATES
- ☐ CATTLE GUARDS
- ☐ FLAG POLE
- ☐ PARK ENTRANCE SIGN
- ☐ FENCE
- ☐ PARK INFORMATION BOARD
- ☐ PARK MAP BOARD
- ☐ VEHICLE BARRIERS

- ☐ TRAILS
 - HIKING
 - CROSS-COUNTRY SKIING
 - INTERPRETIVE

- ☐ SPORTS FACILITIES

- ☐ LANDSCAPING

- ☐ PARK MAINTENANCE EQUIP.

- ☐ OTHER

Hiring a Pro

Once a committee has identified its park development needs, done some budgeting and written a program statement, it is well-prepared to hire the professional planning and design services of a private consultant. The more advanced you are in your thinking, the more the consultant's product will match your needs and expectations. Try to avoid paying an outside consultant to make recommendations that you could have come up with yourself.

Professional help can be costly so use it only when you stand to gain from the investment. Here is what it can buy:

. Independent Viewpoint:

Consultants have a fresh, outsiders perspective on your project which may help in resolving complications.

. Professional Expertise:

Consulting firms have a wide range of experience to draw on, and specialized skills to apply to your particular needs.

. Resources:

A consultant may have to be hired if you lack the resources to do it yourself.

Always weigh an expert's opinion carefully. Be open to new ideas and suggestions, but don't give up on what your preliminary work has told you.

Consultants

Look for a firm that will work for you and with you.

Here is a brief description of a happy client-consultant relationship.

1. The committee writes a terms of reference outlining the work to be done.
2. A request for proposals is sent to several qualified consulting firms. Proposals should include:
 - . description of the firm;
 - . outline of related experience and client references;
 - . background of personnel who would do the work;
 - . a description of how the work would be done;
 - . a projected time table;
 - . the cost to the client, including all fees and expenses.
3. The committee reviews the proposals, checks references and chooses several firms for an interview.
4. Interviews with short-listed consulting firms are conducted.
5. A consulting firm is chosen and agreements are signed.
6. The committee supervises the work, with periodic meetings scheduled with the consultant to review progress and give approvals, if required.
7. The work is reviewed, modified if required, and accepted.



Know Thy Site

Take a closer look at the site before putting your development plans on paper. Make a site analysis map showing the site's physical characteristics. This information is a must if park development is to be successful. You don't need to do a Ph.D study before planning and construction, but you must have a very good idea of what type of development the site can withstand and where this development is best located. The best site analysis is part factual, part gut-feeling.

An expert's advice will be very beneficial during site analysis. Spend time walking the site with specialists from relevant government agencies, such as, recreation and parks, forestry, fish and wildlife, and environment. Take advantage of them, your tax dollars are already paying their wages!

Specialists will also be able to advise you on the regulations in effect in your area. Use them at

an early stage to familiarize them with your plans. Their knowledge of the project will be useful later if they are required to review and approve your development application.

Site Analysis

Here is a six-step process to help you carry out a site analysis:

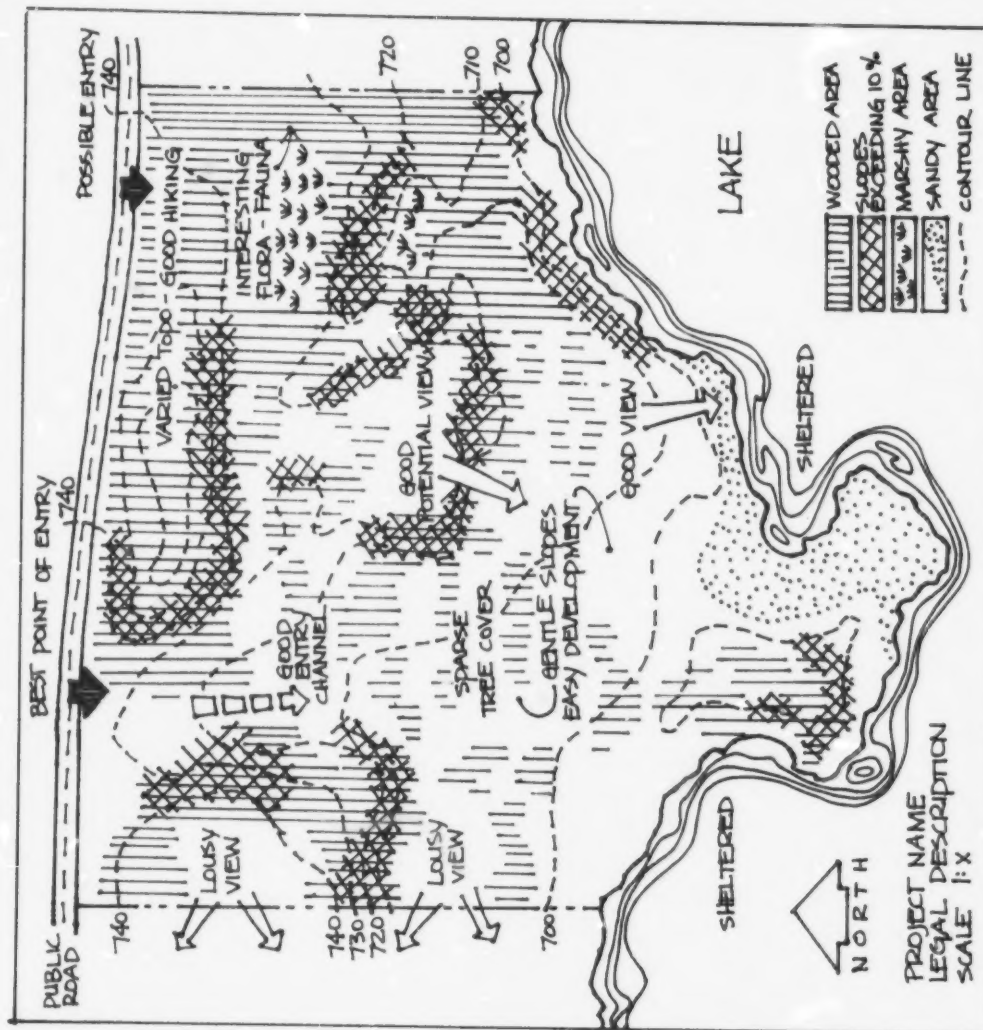
- ☐ Determine the legal description of the site (i.e., SW 1/4, Section 30, Township 25, Range 24, West of the 4th Meridian). Legal descriptions are shown on the land title or lease document, along with the size of the parcel.

- ☐ Obtain a legal survey plan of the parcel or a large scale topographic map showing as much detail as possible. The survey will show exact boundaries and the topographic map will show road access, contours, and the relationship of the parcel to surrounding features.

1:250,000 scale maps are useful for regional relationships and overview; 1:50,000 maps (about 1.25 inches to the mile or 2 cms to the kilometre) show topographic contours, land features and built-up areas.

- ☐ Airphotos can be very useful for larger projects. Visit the government air photo library. (See the SOURCES section for address.) Select recent black and white photographs in the largest available scale. Outline an area around your park and ask that it be enlarged. Air photos can be enlarged six to ten times, depending on the quality of the photograph and the capability of the photo laboratory. An enlargement is much easier to work with than a standard air photo.

SITE ANALYSIS MAP



The enlarged area should include the whole park and enough of the surrounding area to establish the park's relationship with the access road (or proposed route), and important adjoining resources such as lakes, rivers, cleared land, and industrial sites.

- ☐ Compare the air photo enlargement with the survey plan and 1:50,000 scale topographic map. Use these to draw a base map of the park site at a scale of approximately one inch to 100 feet (1":100'), if possible. This scale is usually adequate for drawing plans and staking the development in the field.

The base map shows what you have to work with. It should include:

- . an accurate outline of the park boundary and adjacent access road;
- . on-site roads, buildings, and other developed features;
- . outlines showing lakes, sloughs, and the limits of steep slopes;
- . outlines showing treed areas and clearings;
- . a north-south arrow, map scale, project or park name and legal land description;
- . a blank area that can be used later for notes or to summarize proposed development.

The base map should be uncluttered enough to permit other work to be drawn on top of it. It should be in a format that will allow it to be easily and affordably reproduced. A base map inked on plastic film (mylar or acetate) or tracing paper can be reproduced like a blueprint. Most base maps are too big to be photocopied.

Run off some working copies and preserve the original in a safe place.

- ☐ Members of the committee, with available experts, should take a copy of the base map and walk the entire park development site. The following characteristics should be sketched onto the base map:

- . road access to the site and on-site road development;
- . areas prone to flooding from creeks and rivers;
- . the drainage pattern and low, wet spots;
- . hazard areas (e.g., steep slopes and banks);
- . areas with good views;
- . utility lines, pipelines, fences;
- . shoreline conditions (e.g., rocky, sandy, marshy, steep drop-offs);
- . burned-over areas;
- . obvious wildlife areas (e.g., nesting, refuge, viewing, animal trails);
- . areas where conditions may affect human comfort (e.g., winds, cool temperatures, adverse odours, sounds);
- . adjacent uses likely to affect the site;
- . vegetation characteristics: type and density of trees and shrubs, and special features (e.g., wetlands).

- ☐ Transfer the site analysis notes to a good copy of the site analysis map.

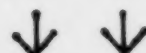
The site analysis map shows physical opportunities and constraints to park development. Other studies and information may be available to bolster what you have already noted. Many lakes have hydrographic maps, for example, showing bottom contours useful for locating boat launches and swimming areas.

If land use regulations will affect site development, these can also be plotted on the site analysis map. Setbacks to protect rivers and

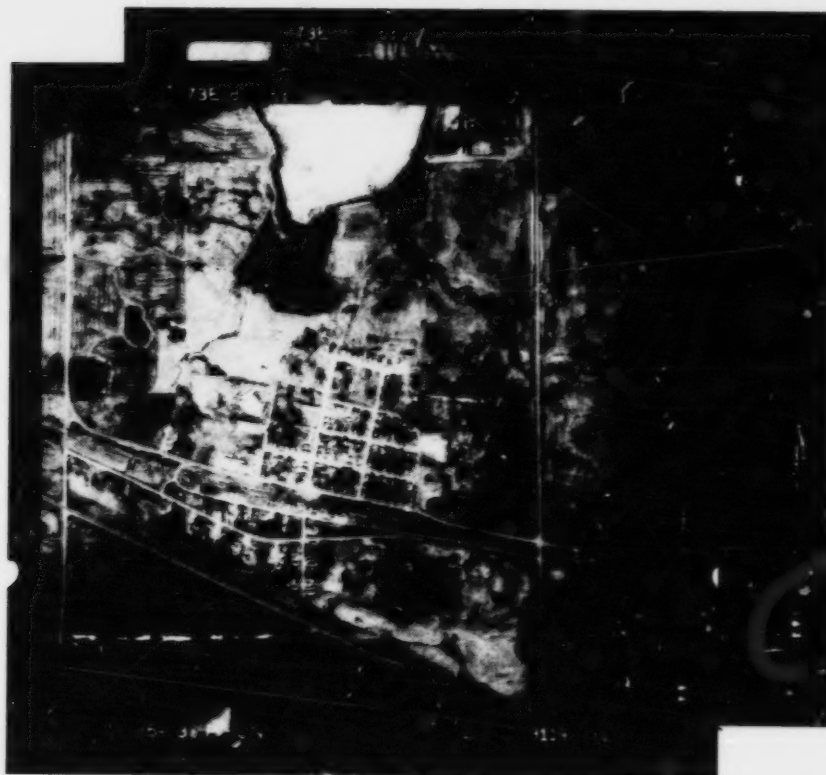
AIR PHOTO ABC'S

1:250,000 TOPOGRAPHIC
MAP SHEET REFERENCE
NUMBER (73 E 8)

PHOTO SCALE (1:10,000)
AND DATE (15.04.85)



ORDER A
PAIR OF
SUCCESSIVELY
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PHOTOS IF
USING A
'STEREO SCOPE'

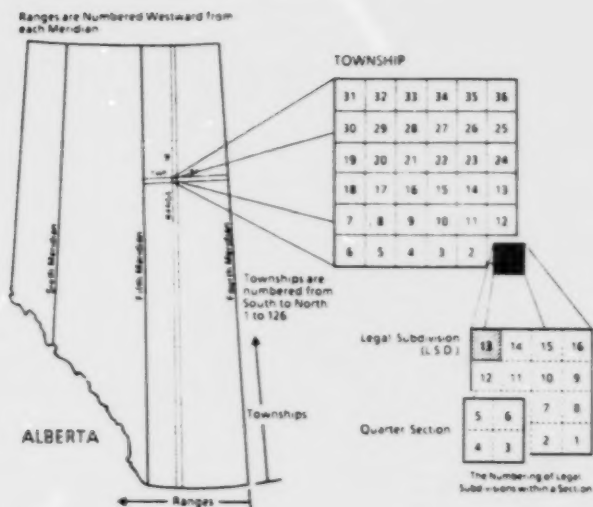


FLIGHT LINE AND PHOTO IDENTIFICATION NUMBERS

- MAP SHEET, SCALE AND DATE ARE USUALLY PRINTED AT THE NORTH BORDER OF PHOTO.
- PHOTO SCALE READS: 1" ON THIS PHOTO EQUALS 10,000" ON GROUND (1" : 834')
- ANY PORTION OF AN AIR PHOTO CAN BE ENLARGED. TO FIND NEW SCALE, DIVIDE ORIGINAL SCALE BY THE NUMBER OF TIMES ENLARGED.

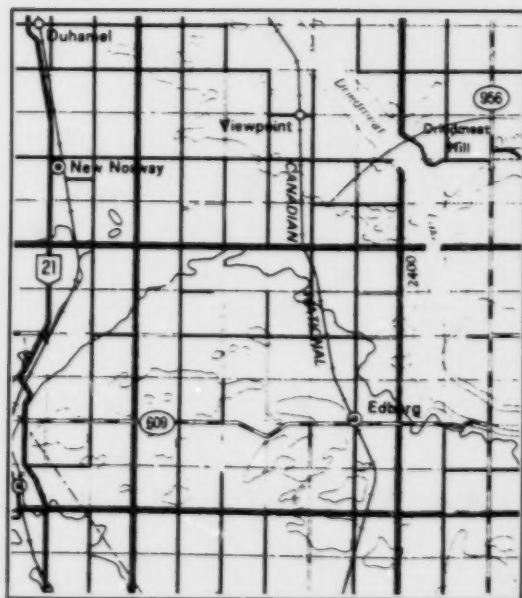
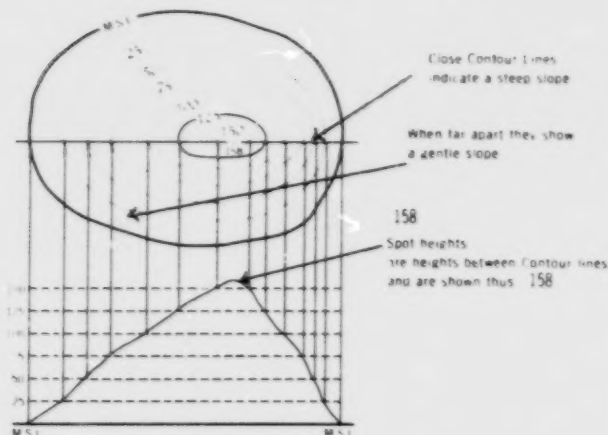
LEARN TO BE A MAP READER

ALBERTA SURVEY SYSTEM.

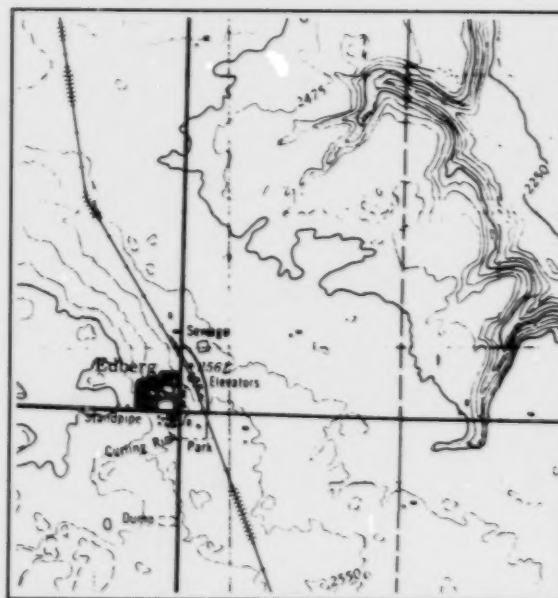


TOPOGRAPHIC MAPS HAVE CONTOUR LINES.

These are drawn through points having the same elevation. They show the height of ground above sea level (M.S.L.) in either feet or metres and can be drawn at any desired interval.



1:250,000 SCALE TOPOGRAPHIC MAP - GOOD FOR OVERVIEW.



SAME AREA ON 1:50,000 SCALE TOPOGRAPHIC MAP SHOWS MORE DETAIL

lakeshores, for example, may influence the development area. Some lakes have boating restrictions you must also be aware of.

Follow-up work such as soil testing and water dowsing could also be carried out and the results added to the site analysis map.

A useful plan can now be prepared.

Putting Your Ideas On Paper

Park plans show how the site will be developed. They get more and more refined as your ideas gel; starting with a very general bubble diagram, moving to a more detailed concept plan, then being finalized as a buildable development plan.

Bubble Diagrams

A bubble diagram is a good way to start drawing the plan. It is a schematic way of considering the functional relationships and links between the major activity areas of the park. It's a bit like moving paper furniture cut-outs around a diagram of your living room to get the best arrangement.

Major activity areas show where people will be doing things like camping, picnicking, playing sports, parking vehicles, launching boats, etc., and include service and residence areas required by park staff.

Use a piece of clear plastic or tracing paper to overlay the site analysis map. The notes you've made on the site analysis map will

give you the common sense clues you need to begin identifying the best locations for park development. You won't want to put camping in a low, wet area, or a parking lot on top of the best beach, for example. Read the last half of this manual for more ideas on what should go where.

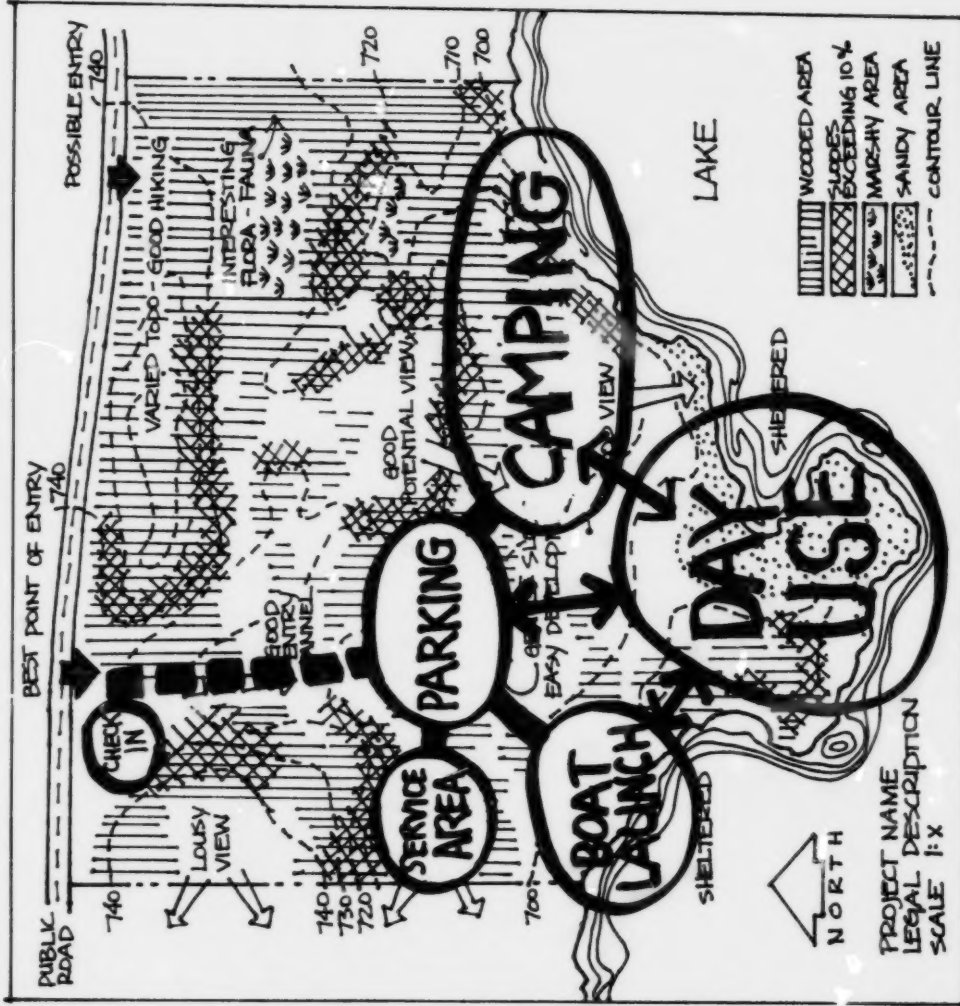
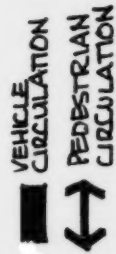
Use coloured pens to sketch broad outlines around each proposed major activity area, using a different colour for each type of activity. Draw a blue line along the shore of any water body. Exact scale and location are not important.

Draw lines connecting the bubbles to show how the areas will be typically used by visitors and park staff. Different lines can show the circulation pattern for vehicles and pedestrians. The circulation pattern shows how people move around the site. One bubble may be connected to several others. A parking area, for example, may be connected to a beach, a playground and a concession building, in the same way that people would park and walk to these areas. Use another broad line to show park access.

Consider how the circled areas relate to each other. Questions will arise, such as: should the picnic area be walk-in only or vehicle accessible? or should the campground be connected to the main beach area by a road or a walking trail? Remember to include management needs in the bubble diagram, such as, a park office, check-in station, and maintenance compound.

Put yourself in the picture. Will day users have to walk through the campground to get to the beach? Is the boat launch too isolated, or will it be within walking distance

BUBBLE DIAGRAM



of the picnic area? Can parking be centralized, or is more than one parking area required? Can a check-in station, park office and maintenance compound be successfully clumped together, or will they have to be located separately?

Try out alternative arrangements until you are satisfied with the schematic design.

- . The bubbles should minimize potential user conflicts.
- . The extent of road development should be minimized.
- . Parking areas should be limited to only those required.
- . Management areas should be located for efficiency of use.
- . The proposed use must match the resources.
- . If possible, the bubbles should leave part of the park undeveloped for wildlife, for hiking, for future expansion.
- . The best resources should be left for park visitors to use and not be criss-crossed by roads, or developed as park maintenance areas.

The Concept Plan

The concept plan is usually drawn to scale and shows the approximate location of all major activity areas and connecting roads. Details are provided later as the plan is refined. Several optional concept plans, illustrating various design solutions, can be prepared for discussion purposes.

The concept plan can be prepared once desired patterns of park use

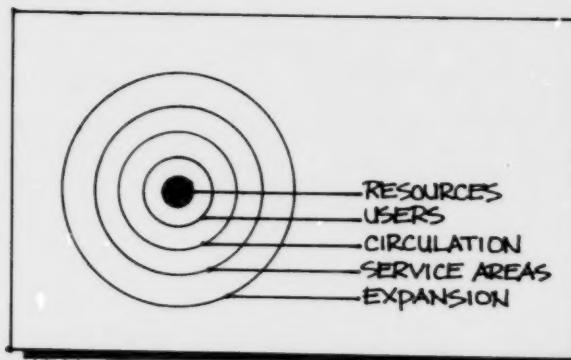
and circulation (as shown in the bubble diagram) have been agreed upon. The concept can be drawn on another copy of the base map. You may want to transfer some site features noted during the site analysis onto the concept plan. Heights of land, wet areas, beaches and clearings, for example, will make the concept plan more intelligible to people unfamiliar with the project and the park site.

Use the blank panel on the base map to give a brief background to the project and to summarize the proposed development.

The concept plan is often the first point at which people can visualize what the park will actually look like. Concept plans stimulate a lot of discussion. People can mentally *drive* the roads, use the campground, and *hike* the trails. The site analysis and bubble diagram begin to take on new meaning. *Walking around* the plan in your head is a good way to test the concept.

What to Look For

Five areas are especially important when developing and evaluating a concept plan. Think of these areas as five interrelated circles or ripples, with park resources at the centre.



WHAT TO LOOK FOR IN A CONCEPT PLAN.

1. Resources

Making sure that park development suits existing resources is one of the major challenges of the concept plan, and probably the most important. Resource concerns should be a part of almost every planning decision.

The development proposed in the concept plan must fit well with actual site conditions. Environmental disturbance must be kept to a minimum except where damaged landscapes will be rehabilitated.

The proposed development should be easy to build, without excessive cuts, fills, grading and clearing.

Here are three points to keep in mind:

- . Wet areas are poorly suited to development, but well suited to breeding biting insects!
- . Areas with interesting topography, vegetation and views can be reserved for activities such as hiking, cross country skiing and nature viewing.
- . Don't put costly development in areas that may be flooded.

2. Users

Areas developed for outdoor recreation must not only be located in appropriate environments but must also relate harmoniously to each other. Each type of use has its own *personality*, its own characteristics that must be considered during planning.

This chart shows the characteristics of three types of park use. As you can see, uses are not always compatible.

	NOISY	QUIET	SOCIAL	PERSONAL	ACTIVE	RELAXED	STOPS EARLY	GOES LATE
PICNIC AREA	●		●		●			●
FAMILY CAMPING		●		●		●	●	
GROUP USE	●	●	●		●		●	●

CONSIDER THE COMPATIBILITY OF DIFFERENT USES.

Mixing a noisy, active picnic area with a quieter, more personal campground will lead to conflicts. Group use is so varied and specialized that it frequently needs an area all to itself.

Separating major activity areas has important benefits:

- . Potential conflicts among users will be avoided.
- . Development can be tailored to fit a particular type of use.
- . The park is easier to manage.

The physical separation of major activity areas means that each area can be individually managed without adversely affecting the rest of the park. A campground, for example, can be closed or reserved without affecting the picnic area; the boat launch and parking area can be kept open for winter ice fishing while the rest of the park is closed for the season.

Harmony among user areas is one of the main keys to a concept plan that works.

Areas can share facilities. The picnic area and the campground, for

example, could share some visitor services, such as, toilets and firewood and drinking water supplies. Sharing promotes management efficiency and cuts development costs.

Links also allow areas to share attractive park resources. Campers, while separated from picnickers, will also want to use the beach and take advantage of what the picnic area has to offer. In other words, separate major activity areas but don't isolate them.

3. Circulation

Roads, the major means of circulation, must be carefully thought out in the concept plan. Roads should provide access to the park's major activity areas but not overwhelm them. Road development should be kept to a minimum. Vehicles should be kept where they belong - confined to areas where they won't interfere with people. Removal of old roads is a major part of many park redevelopment plans.

Many people like to drive right up to the park attraction, but this can interfere with everyone's enjoyment.

Here is how to improve your circulation:

- . Show all roads and pedestrian trails on the concept plan.
- . Indicate the direction of traffic flow.
- . Minimize the need for roads in the first place.
- . Design a safe road pattern (i.e., no long straight-aways, 90° intersections, etc.).

- . Make sure that roads lead up to, rather than through or along, prime park attractions.

- . Avoid steep roads which are slippery when wet or icy.

- . Go for a natural look. Locate roads with regard to the environment, not to resemble a pattern of city streets.

- . Take advantage of existing roads only if they can be successfully incorporated into the plan.

The outlines of all parking areas should also be shown on the concept plan. They should be strategically located to be convenient to more than one activity area. The size of the parking area should relate realistically to the number and type of vehicles expected. Plan parking areas for existing flat clearings only if that is the best place for them.

4. Service Areas

Service areas are used by park staff to make the park run. They are the *boiler room* of the park and must be carefully considered during concept planning. Check to see that all major park management needs are provided for on the plan.

Consider the following:

- . Check-in station at park entrance
- . Park office
- . Caretaker's residence
- . Storage building
- . Workshop
- . Fenced-in stockpile/storage area
- . Garbage disposal
- . Sewage treatment
- . Irrigation
- . Concessions

Your committee must decide on what development will be required to operate and maintain the park. Choose an adaptable park design if changes in management methods are anticipated. Self-registration campgrounds or a park office, for example, may have to be worked into the design after the park has been operating for several years. Keep your options open.

Evaluating the management aspects of the concept plan may cause you to seek alternative, off-site solutions. Connections to nearby utilities may present the ideal solution to providing the park with power, water, sewage removal, and telephone lines.

Park service areas should not use up large tracts of prime park land. Locate them for efficiency and convenience. Take advantage of otherwise unattractive sites. The caretaker's residence or serviced campsite should not take the best spot in the park. Park managers are there to provide essential services and host the public, not to compete with them.

Concessions are services sold in the park by private operators under special agreement with the park management authority. They range from canoe rental and trail rides to hot dog stands. Unlike contracted caretaking services, concessions usually require specialized facilities, either portable or built in the park.

Stables, corrals, marinas, boat-houses, restaurants and stores are examples of concessions relying on built facilities. If the park will have concessions, include them in the concept plan. The pros and cons of concessions, not covered in this manual, must be carefully weighed.

5. Expansion

The option for future expansion should be built into the park plan from the beginning, if possible. It is a way of reserving an area of the park for later development, and relieves pressure to build everything at once.

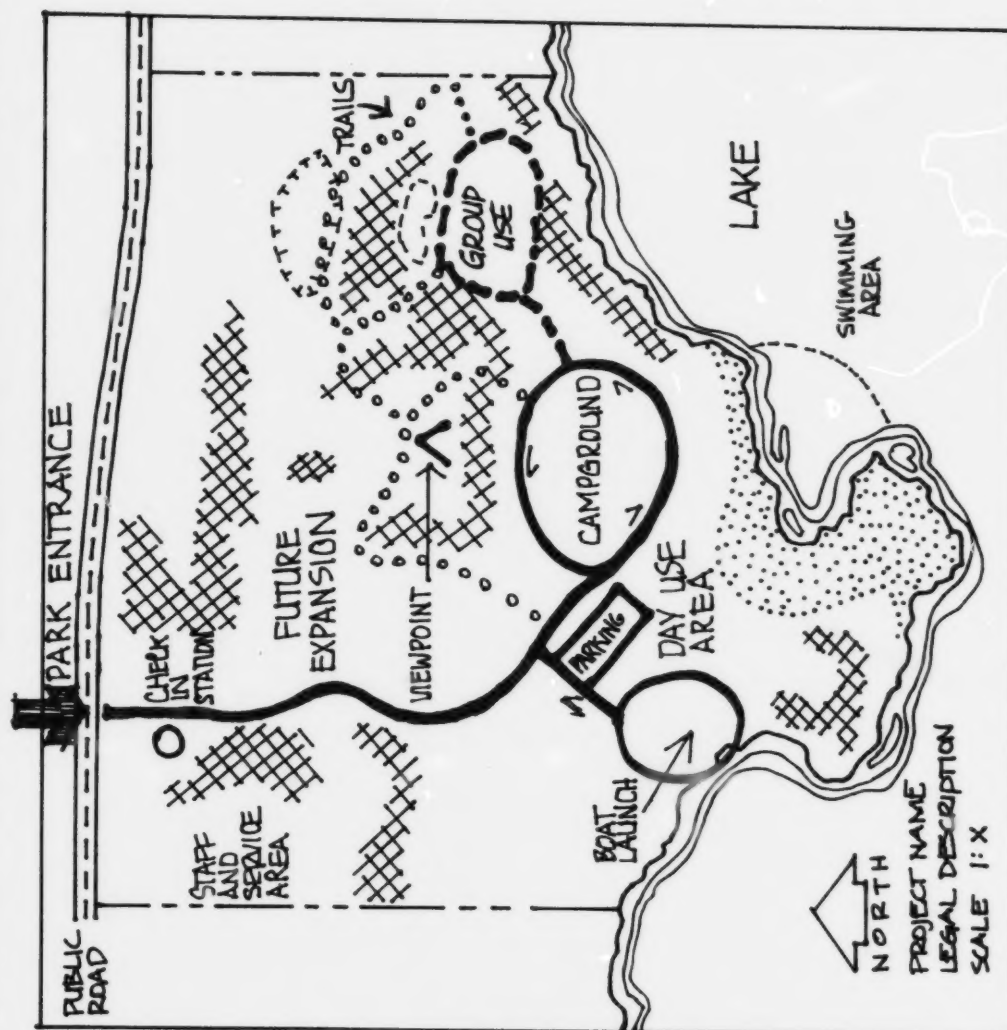
Check the concept plan to see if an expansion area has been set aside for future use. If developed, could the expansion area be easily and harmoniously linked to existing park roads and other major activity areas?

Setting aside an area for future development doesn't mean that the area has to be left idle. Here are several ways that an expansion area can pay dividends even before it is developed:

- . Use the area to absorb overflow visitors during occasional periods of heavy use.
- . Make the area available for advance booking by special groups. Toilets, wood supply and garbage containers should be temporarily provided, or conveniently located nearby.

It may be prudent to hold back some park development until it becomes obvious that there really is a need for it.

Limited finances are another reason for deferring some park development. A scaled-down park can be added to as development money becomes available. A campground, for example, can be expanded later by adding another campsite loop or by creating a special group use area.





Public Participation

The concept plan, with some accompanying background and descriptive information, is an excellent way of presenting the project to the public. Public meetings are useful for:

- . updating the public on the project;
- . gathering ideas for revising the plan;
- . picking one plan out of several choices;
- . ensuring that the plan meets with public expectations;
- . promoting the project;
- . asking for further assistance;
- . absolving the committee of sole responsibility by giving the public a chance to comment;
- . demonstrating that the project is a well-organized group effort.

Public meetings benefit everyone. They can serve to identify and defuse potentially controversial situations. Remember to hold them at a convenient time and place and advertise them well in advance.

Refining the Concept Plan

You may want to change the concept plan after you have had a chance to evaluate the various options and listen to public reaction. Almost every concept plan is *fiddled* with as different factors are taken into consideration.

Remember, it's far better (and cheaper) to change a plan while it is still at the conceptual stage. Later changes may go over budget and may mean design work, already paid for, will have to be redone.

The park committee should agree on a final version of the concept plan. It will be advantageous to have a copy of the plan lettered and coloured for presentation purposes. A plan that's well put together speaks volumes for the capability of a group to undertake a project.

How Much Will It Cost?

Finances are often the deciding factor in deciding what really can be done. Estimating can begin as optional concept plans are being evaluated. A complete, detailed budget can be prepared once the committee has adopted a final version of the plan.

Accurate cost estimating is an art. Here are some points to keep in mind:

- . Stress quality over quantity.
- . Remember to include three types of costs: materials, shipping and labour.
- . Get more than one price.
- . Shop around locally.

- . Cut back on development rather than underestimate.
- . Don't buy it *off the rack* if you can do it better and cheaper on your own.
- . Talk to the experts. Compare your estimates with actual costs of similar projects. Use your network of local contacts and government specialists.
- . Don't forget to include professional fees and administrative costs.

A good way to begin a budget is to make a list of all tasks, starting with those jobs that will have to be done first. Keep adding to the list as you visualize the park being built.

Here is an idea of what the sequence might include:

1. Planning and design costs and fees.
2. Costs for supervision during construction.
3. Administrative costs (including insurance).
4. Surveying and title search.
5. Fencing and gates.
6. Initial clearing and site preparation.
7. Roughing-in roads.
8. Ditching and culverts.
9. Utility service installation.
10. Site work on major activity areas.
11. Well drilling.
12. Excavating toilet pits and building foundations.
13. Building structures.
14. Fabricating and installing vehicle controls.
15. Finishing major activity areas.
16. Fabricating and installing all site furnishings.
17. Finishing interiors and exteriors.

18. Landscaping.
19. Fabricating and installing park signs.
20. Site reclamation.

One of the difficulties of cost estimating is trying to accurately predict the quantity required. Quantity figures in almost every item, from the number of hours of labour to the amount of sand and gravel. Some quantities are hard to estimate and most projects encounter unforeseen conditions that require dollars to remedy. An estimate is just that, an educated guess based on a lot of work.

During cost estimating it will be tempting to cut costs by choosing a less expensive design, material or contractor. Make these choices very carefully. Good designs work better. Better materials last longer. And, poor fabrication and installation will mean expensive upgrading when you can least afford it.

The form on the next page is one way of compiling a cost estimate.

[illegible]

The Budget

A budget is a financial statement of all expected revenues and expenditures associated with a project. It summarizes what will be done, how much it will cost, and where the money will come from.

Here are some guidelines for preparing a budget:

- Be realistic about costs and quantities. Make sure they match the development proposed on the concept plan.
- Phased development requires a phase-by-phase budget breakdown. Building a park can stretch out over a few years. Budget so that at least some part of the park is usable at the end of each phase.

- . Itemize the budget so that it can be easily evaluated by someone totally unfamiliar with the project.
- . Justify large, single, expenditures by a further breakdown.
- . Make sure that items are separate and non-repetitive.
- . The budget must be thorough and cover all park development costs.
- . A 10% contingency fund is desirable, but avoid identifying vague *slush fund, other, or miscellaneous* categories.
- . Balance the budget. If outgoing expenditures do not match incoming revenues, you should explain.
- . Double check the adding!

Aim for a budget that will hold up to close scrutiny by grant administrators.

Putting It All Together

Projects requiring grant funding or development approvals are usually required to submit a park proposal as part of an application. The concept plan and budget can form the basis of a proposal. The proposal should be concise, comprehensive, clearly written, and general enough that it can be sent wherever required. A tailor-made covering letter outlining what is required of the recipient can be included each time the proposal is sent out.

The best proposals have quality ideas and not just a fancy binding!



PARK PROPOSAL

A Sample Table of Contents:

Covering Letter	
Brief Background	
Organization Involved	
(Location Map)	
Social and Recreational Setting .	
Land Ownership	
(Base Map)	
What Exists Already	
(Site Analysis Map)	
What is Proposed	
(Concept Plan)	
How The Project Will Be Managed .	
Project Schedule	
Capital Budget	
Sources of Capital Development	
Funds	
Responsibility for Operation	
Operating Budget	
Sources of Operating Funds	
Who Will Benefit from the	
Project	

Appendices:

Land Title, Lease, Agreements ...	
Letters in Support of the	
Project	
List of Advisors	

PHASE III: DEVELOPMENT



What's Next

Park development can begin once all required financing and approvals have been secured. Like the planning process, the development phase also has a number of steps:

- . Preparing a development plan
- . Adopting a method of project management
- . Hiring
- . Site layout
- . Final design decisions
- . Construction
- . Inspection

The development phase can take anywhere from a few months to one or more years, depending mainly on the size of the project, the nature of the development, and on the availability of sufficient funds. Be methodical. Even the best planned park won't work if it isn't built right!

The Development Plan

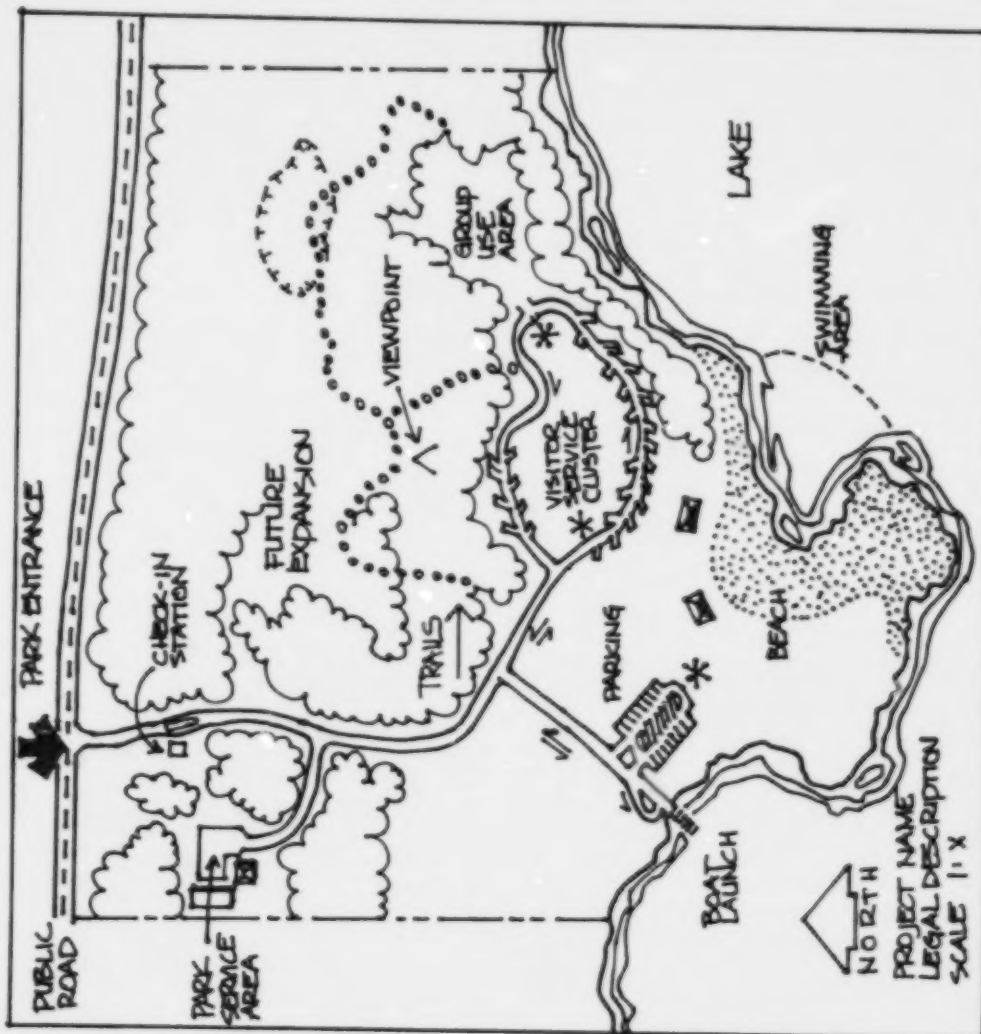
Park construction requires a drawing that accurately shows the location of all development. This development plan embodies all final planning decisions and serves as the guide for laying out the site in the field. What you build should closely resemble the development plan because you have already made the major decisions on paper.

The development plan, in most cases, doesn't have to be a set of detailed construction drawings and blueprints. Usually the concept plan can be redrawn, adding enough detail to make it buildable. The development plan doesn't stand alone. It must be coupled with well-informed assistance during site layout, and close supervision during construction.

Ongoing assistance is required because of the many details and precision adjustments required as the development plan is *translated* onto the site. Only the most sophisticated development plan can anticipate a buried rock layer or particularly scenic trees that should be left standing.

The development plan includes the following details:

- . All roads are drawn to scale and are shown in their final location.
- . Parking areas are drawn to scale to accommodate the required number and type of vehicles.



DEVELOPMENT PLAN

BACKGROUND

DEVELOPMENT

- o _____
- o _____

1. _____
2. _____
3. _____



- . Major activity areas now show such details as campsite spurs and loop layout, boat launch turn-around, and the pattern of roads at the entrance area.
- . Structures are shown in their preferred locations, with the outlines of large structures drawn to scale.
- . The location of visitor services, such as toilets, firewood supplies, garbage bins and water supplies, are shown in their preferred location.
- . Park management requirements are detailed including the location of maintenance areas, the park office, etc.

Details, Details, Details ...

When are more details required? More accurate construction drawings are required:

- . When the committee will not be closely involved in park construction.
- . For major buildings.
- . When extensive land modification is required.

Contractors unfamiliar with the project cannot be expected to read the minds of the committee that hired them. Major buildings must be properly designed and engineered, and built to code. Parks requiring a lot of earth moving, drainage work, and topsoil improvement may need a grading plan. Exact specifications are important if the park is to be built on a reclaimed site, such as an old landfill.

Provide as much detail as you need to get the job done right.

Project Management

There are two ways of managing park construction: hire a general contractor or serve as your own contractor. The general contractor is the person responsible for seeing that the development plan is built as shown. This person is also responsible for billing, paying and supervising all sub-contractors hired to do specialized work (electrical, plumbing, earthmoving, etc.).

Hiring a general contractor involves the same steps as hiring a consultant. A terms of reference is prepared, bids are solicited and a contract entered into. Remember that the lowest bid may not be the best one. The contractor's experience, skill and ability to work with and supervise others must also be carefully evaluated.

Ask for references and visit other projects a contractor has worked on. Make sure you know the reliability and reputation of any contractor you hire.

The contract is a legally binding document once both parties have signed it. Get it in writing and seek legal advice before signing the contract. A contract is meant to protect both sides. Make sure the terms are specific: the client will receive what was promised at the agreed price, and the contractor will be paid a fixed amount for a specific piece of work. Contracts with vague endpoints can be real nightmares.

A Typical Contract

A typical contract includes:

- . Names and addresses of the buyer (the committee) and the seller (the contractor).
- . A detailed description of the work to be done, quantities involved, materials to be used and quality of work required.
- . An assurance that all work will be done according to locally applicable codes and regulations.
- . A clear statement of the liabilities assumed by each party (public liability, worker's compensation, property damage, etc.).
- . Details of site handover, final inspection, approval of completed work, and site clean-up.
- . Starting and completion dates.
- . Price and means of payment.
- . A statement of all warranties and maintenance periods explaining exactly what is covered and for how long.
- . Special conditions which would lead the buyer to terminate the contract.
- . Details of how additions or changes can be made to the contract.

Most contract work includes a holdback of 15% of the total contract fee as a final payment. The holdback is paid after enough time has elapsed to ensure that the work has been performed satisfactorily, and that there are no outstanding claims by subcontractors and workers. Holdback percentages vary from province to province.



Doing It Yourself

Park committees serving as their own general contractors have managed the construction of many successful projects. Serving as your own general contractor has several advantages:

- . You can save money.
- . Subcontractors and workers can be handpicked.
- . You have built-in familiarity with the project and with local conditions.

Being your own contractor isn't easy. The project will require full-time supervision. All approvals and permits will be your responsibility. Financial management of the project will be in your hands.

A lot of work? Yes, but it's been done before. Here is a summary of the major responsibilities of the do-it-yourself contractor:

- . Approvals: A lawyer can assist you in reviewing all required approvals. Each government department involved can also help in explaining the regulations and letting you know who else has jurisdiction in the area. Municipal offices may also have important information.

- . Liability: You must ensure that workers, the public, and the site itself are protected in case of damage or liability.

- . Subcontractors: Though you may already know who you want to hire, you should shop around and get several estimates before selecting. Some government departments keep lists of contractors. The chamber of commerce may also be able to provide a list of local contractors.

Hire a subcontractor just as you would hire a general contractor. Provide them with a clear, complete description of what needs to be done. They, in turn, should submit a cost estimate and an agreement, in writing, to all aspects of the job they are to do.

Get it in writing and don't sign anything before reviewing it with a lawyer.

- . Work Sequence: Establish priorities based on what is most and least essential. The least essential can be built after the basics have been provided. It is important that construction be done in the right sequence. Check back to the sequence worked out during cost estimating.

- . Money Management: Serving as your own general contractor means that you will be responsible for managing the project's finances. Money management has three important phases:

- . Budgeting
- . Record Keeping and Financial Control
- . Accounting

A lawyer, accountant, or experienced project manager can help you set up your books. There should be a written record of each transaction.

Getting workers paid on time, keeping the lid on construction costs, and maintaining a contingency fund can be quite a challenge.

- . Inspection: Be clear as to which inspections and approvals are required.

- . Guarantees: Though it varies, work should be guaranteed for one year from the date of completion. Do not hesitate to demand correction for deficient work. It's your right. Check for guarantees on mechanical equipment and for performance bonds on some building materials.

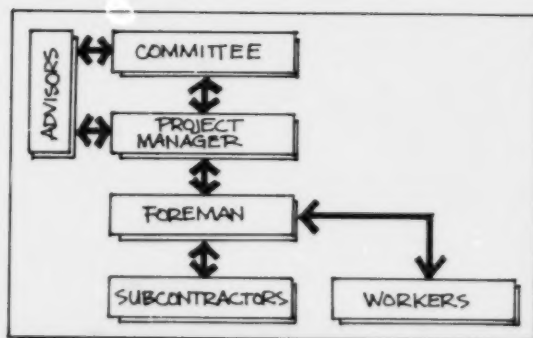
Supervision

Keeping a close watch on construction is essential whether you have hired a general contractor or are doing the work on your own. Your designated project manager should make frequent visits to the site to monitor the work of the general contractor. The project manager should also be on hand to consult with expert advisors who visit the work in progress.

Committees serving as their own general contractor usually hire a foreman or *strawboss* to supervise day-to-day construction. The foreman should be experienced and have good *people* skills.

A good working relationship between the project manager and the general contractor or foreman is absolutely essential to getting the park built right. Each should have clear cut responsibilities and a good understanding of who's in charge.

Set up and maintain good lines of communication between the various people involved. Establish who makes the decisions and who you go to with a problem.



SET UP AND MAINTAIN CLEAR LINES OF COMMUNICATION.

Design Principles

Good design considers the needs of the site itself, the visitors who will be using the site, and the staff who will operate and maintain it. These three factors should guide your development decisions. Lack of funds may mean holding off on development, rather than settling for inadequate design and construction. When choosing a less expensive interim solution, make sure it doesn't harm the site, inconvenience the visitors, or hamper proper management.

. The Site: The development plan should ensure that the proposed use of an area is environmentally sound. Base your plan on the site analysis, local and expert knowledge of the site, and a common sense *gut feeling*. You should be confident that use and development of the site will match its natural capability to withstand that use.

. Visitor Use: Consider what brings people to the area; what attracts them; what type of development (or non-development) is necessary to support their use and make it as enjoyable and safe as possible. Remember that the design of an area influences how it is used. A nice beach invites possibly hazardous water activities. Hidden spaces or easily-damaged building materials will increase chances for vandalism. Never risk visitor safety by design.

- . Operating Needs: Think ahead and make sure that the design of the park makes it convenient and easy to operate and maintain. Consider management necessities as well as user convenience. An improperly located firewood stockpile may become a real headache to keep supplied. Although toilets are for park visitors, remember that they also have to be serviced, possibly pumped out, and washed down at regular intervals. Exotic landscape plantings may be pretty but they may require pampering. Native stock planted in natural groupings might *take off* like a weed and need little attention.

Designing with maintenance in mind can save money, improve visitor and employee safety, and ensure operating convenience. Here are some tips:

- . Design to concentrate use at *fortified sites* that localize intensive management efforts and *take the heat off* adjacent areas.
- . Unclutter and uncomplicate. Strive for simple design solutions that minimize visitor frustration.
- . Design facilities that are easy and safe to maintain.
- . Standardize fixtures and materials to streamline maintenance requirements.
- . Make short-lived or easily-damaged materials and fixtures convenient to repair and replace.

- . Don't pass on design faults, construction problems, and poor workmanship to the operating budget to be fixed later.

Designing with operating needs in mind makes good cents!

MATERIALS SELECTION

Consider various factors when selecting materials.

- . durability
- . appearance
- . availability
- . ability to take and hold a finish
- . climatic adaptability
- . drainability
- . cleanability
- . Is the material prone to vandalism and easy to repair afterwards?
- . Uniformity - is it complementary to other materials used in the park?

Construction Principles

Park construction has several phases:

- . Layout
- . Construction
- . Reclamation

1. Layout

Stake the layout of all development before beginning construction. Flag the site with long wood stakes tied with brightly coloured survey tape, or with the tips spray

painted. Roads can be marked by staking the centre line, then measuring off to each side for width. If possible, drive the route with the type of vehicle that will be using the road. It's an especially good way to set up a turning radius.

Stakes can also be used to mark parking areas, building sites, well locations, campsite dimensions, and vegetation slated for removal or preservation during construction. Wait until the roads are in before cutting additional trees, as road construction may *open up* the site more than you thought.

2. Construction

Site impact during construction should be kept to a minimum, and the area should be reclaimed quickly afterwards. Construction can easily damage trees, water quality, shores and soils - damage which can take years to heal. Construction impact can be limited by:

- . Careful supervision of work crews.
- . Clearly indicating exactly where construction is to take place.
- . Using the right size equipment.
- . Avoiding soil compaction and vegetation damage.
- . Keeping dust and erosion to a minimum.
- . Employing skilled, conscientious operators.

Construction should be monitored by regular, timely, on-site visits. Watch for:

- . Quality control.

- . Substitution of lower grade materials.
- . Items such as plumbing, footings, irrigation, electrical work, etc., that will be hidden by further construction.

3. Reclamation

Park construction leaves scars that need prompt and thorough attention. After construction be sure to:

- . Obtain vegetation cover quickly.
- . Remove all wastes.
- . Remove and reclaim areas such as storage sites.
- . Remove buried construction debris that may cause future problems.
- . Provide good topsoil where required.
- . Backfill all building entrances to ground level.



Safety First!

Crew safety and an adequate knowledge of first aid are essential during park construction. This is especially important if you are working in a remote area. Have someone on site with good first aid knowledge. Always have a vehicle on hand to go

for help or evacuate an injured person (if the person can be safely moved). All crew members should wear proper clothing such as hard hats, hard-toed boots, gloves, eye protection and chain saw pants or aprons. Enforce all applicable rules of proper equipment use. Don't rush the job or work extra-long hours. Keep a well-stocked first aid kit on the site and make sure people know how to get it in a hurry.

To prevent injury to the public during construction, make sure that you have put up adequate construction barriers and warning signs. Don't leave uncovered pits - they are death traps for people and animals.

Cut trees and shrubs close to, or flush with the ground, and cut them flat to avoid spikes.

Check with the provincial department of community and occupational health to get more information about on-the-job safety and worker protection.

Before you dig:

- . Check with Alberta Culture to make sure you will not damage buried historical resources - this is the law!

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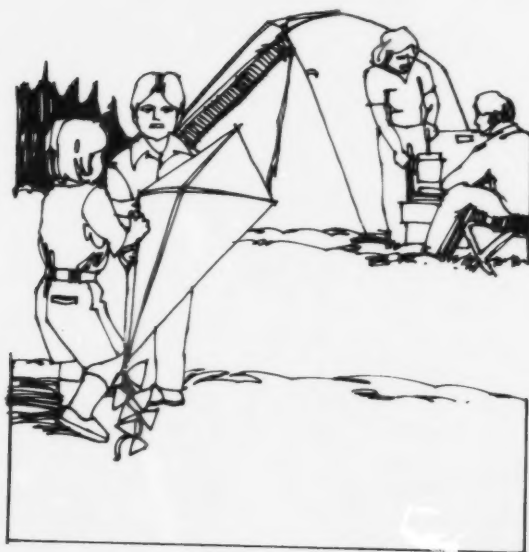
- . In Alberta, call the toll-free line to make sure of the location of all buried cables and pipelines.

1-800-242-3447



**Avoid
Danger
Below.
Call Before
You Dig!**

DESIGN AND CONSTRUCTION INFORMATION



Picnic Areas

Picnic areas are places where people can enjoy a variety of daytime activities. Most picnic areas include open, undeveloped space, usually quite large in comparison to the developed area. Open space is important. It allows for informal, unstructured sports and play, and creates a sense of relaxed *uncrowdedness*.

Picnic areas provide facilities such as picnic sites (a table, stove, clear area), playgrounds, ball diamonds, picnic shelters, and visitor services such as toilets, garbage bins, and water and firewood supplies.

Picnic areas usually have an attraction such as a beach, river shore, or scenic view. Other picnic areas have their own built-in attraction such as a swimming pool, playing field, or large playspace.

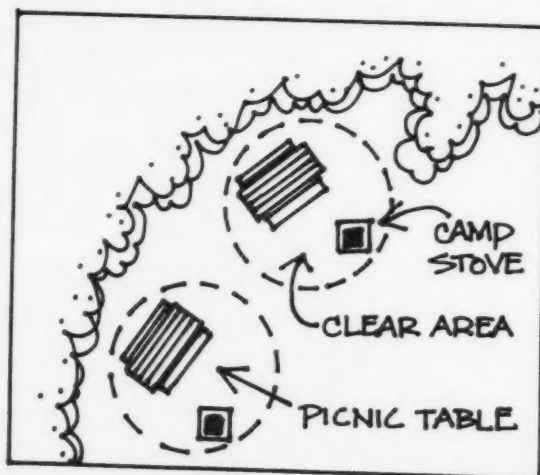
In the following sections we'll take a look at:

- . The **BASICS** of designing picnic areas.
- . Some important **DETAILS** to consider when designing and building picnic areas.
- . Information on typical picnic area **FACILITIES**.

A separate section covers beaches - the main attraction of many picnic areas.

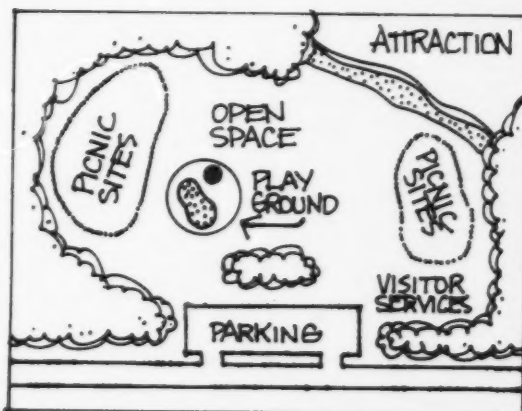
Picnic Area Basics

- . Picnic areas should have good drainage. Avoid areas that are low, wet, or subject to erosion.
- . Always provide an element of open, unstructured space. Don't overbuild.
- . Provide a mixture of sunny and shady picnic sites if possible.
- . Don't crowd picnic sites too close together. Keep a clear area around each site.



THE BASIC PICNIC SITE.

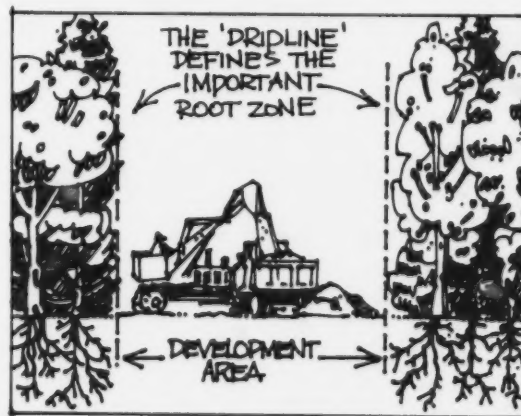
- . If possible, use walking trails to link the picnic area with other major activity areas.
- . Environmental impact on the site can be reduced by providing less parking and fewer sites, by spreading the same amount of development over a larger area, or by building formalized walking trails and surfaced picnic sites.
- . Allow parking for about half again as many vehicles as there are picnic sites (picnic sites x 1.5 = approximate number of parking stalls).
- . Consider the needs of handicapped people in designing picnic areas. Seek advice on the design of *accessible* campstoves, garbage containers, toilets and picnic tables. Steep slopes, loose surfaces, and building entrances can be major barriers.
- . Keep people and vehicles well separated. Parking should not intrude into the picnic area.
- . Don't allow roads, large structures or parking areas to *barricade* people from picnic area attractions.



A TYPICAL PICNIC AREA.

Picnic Area Details

- . If clearing, create naturally shaped open spaces. Avoid cutting straight lines.
- . Leave natural clumps of healthy trees and shrubs if they do not get in the way of the open space, or block good views. Vegetation can help to screen parking areas and toilets.
- . Topsoil removal by grading is not usually required unless you are leveling or improving drainage.
- . The area should be picked clean of large stones and roots.
- . Try to preserve native ground cover, or sow with a hardy, low maintenance seed mix. Consult with a local pipeline company (they use seed mixes for pipeline right-of-way rehabilitation), with your district agriculturalist, or with a landscape architect to select the seed mix, trees and shrubs best suited to your park environment.
- . Heavy equipment moving around trees during construction will compact the soil around the roots and *strangle* the tree.



PROTECT TREES AND ROOTS DURING CONSTRUCTION.

- . Maintain the natural ground level by leaving bowl-like depressions around tree trunks. These depressions can be filled with large diameter gravel.
 - . Locate parking, picnic sites and visitor services within easy walking distance of each other. Walks of 50 m or 100 m may be too far.
 - . Put toilets on the edge of the day use area so they're visible but not prominent. Keep toilets 30 m back from wells and water bodies to prevent contamination.
 - . Locate toilets down-wind from activity areas.
 - . Place firewood in one central stockpile and locate so that new supplies are easy to drop off.
 - . Centralize or cluster garbage bins and toilets to reduce visual impact, for one-stop user convenience, and for easy servicing.
 - . Portable picnic tables can be secured using a length of galvanized chain attached to a concrete anchor. Use of heavy or anchored tables discourages frequent relocation and theft.
 - . Picnic tables on bare ground or grass may require a crushed gravel pad extending 1 m beyond the table to minimize soil compaction, improve drainage under and around the table, and reduce picnic site deterioration. Wood chips or shale can also be used.
 - . Avoid dirt catchers. Make the cracks between boards on picnic tables wide enough to be self-cleaning!
 - . Campstoves should have a safe, fire-proof zone extending out 1.5 m from the stove in all directions, and a vertical clearance of at least 5 m.
 - . A gravel or compacted soil pad is best for an on-the-ground campstove. Concrete pads sometimes break up or explode when heated, due to rapid expansion of internal reinforcing rods.
 - . Campstoves should be easy to clean.
 - . Consider building a picnic shelter that serves multiple uses: as an outdoor classroom, or closed-in winter warm-up shelter (with a door, a stove and removable plastic windows).
 - . Build turf spaces that are easy to mow. Trees and shrubs planted in groups are easier to irrigate and mow around. Think of double planting young stock for good appearance. You can transplant some of the plants later, after they have matured.
- (Consult other Focus Series Manuals and the Park Design Series for details on landscaping, playgrounds, ball diamonds, recreational trails, and handicapped accessibility.)

PICNIC AREA FACILITIES

PICNIC TABLES

PORTABLE



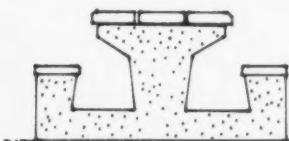
Advantages

- can use wood or metal for frame
- low cost
- easily rearranged
- easily stacked for storage
- easy to make
- wide variety of designs
- easy to replace parts

Disadvantages

- won't last long if not heavy duty quality
- easily stolen
- easy to burn and deface
- requires regular maintenance

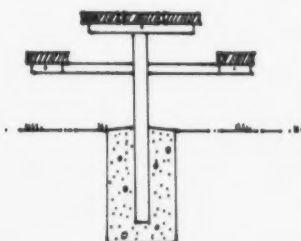
CEMENT



- long lasting
- vandal resistant
- stays in one place
- weather resistant
- low maintenance
- variety of tops
- can buy ends separately

- expensive
- heavy and hard to relocate
- special lifting equipment required to install
- few suppliers, longer to make

ANCHORED

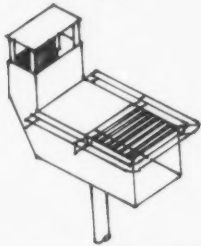


- can be anchored or made removable for storage or repair
- durable
- vandal resistant
- stays in one place

- anchoring required (by setting into a footing or attaching to a concrete pad)
- higher cost than portable table
- installation skills required

CAMPSTOVES

PEDESTAL



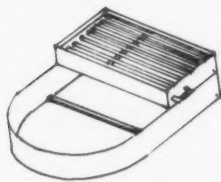
Advantages

- a person can stand while cooking
- stove swivels to get better draft
- easier to adapt for handicapped use
- keeps fire off the ground

Disadvantages

- not 'campfire' like, serves as stove only
- can be hard to clean
- fires can blow out of the stove
- hard to make
- only back half gets hot enough to cook on

RING



- easy to fabricate
- long lasting (8+ years)
- makes good campfire, and good for cooking
- grill and stove ring swing up for cleaning
- has a sturdy rim

- cement pad used as a base will break up
- 12" anchor rods must be cemented into ground

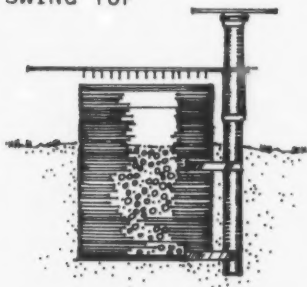
STEEL CULVERT



- various diameter culverts readily available
- easy to fabricate
- can substitute heavy walled pipe for longer life span

- zinc coating not heat resistant, culvert rusts in several years (3+)
- rim easily crumpled (people use the rim for breaking firewood)

SWING TOP



- can substitute heavy-walled steel pipe

- people fall into the grill when it's in the swung position
- the culvert rusts and the rim is easily crumpled
- will not draw well if improperly installed
- complicated to build

PICNIC SHELTERS

WOODFRAME



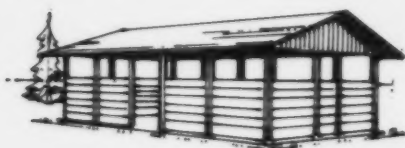
Advantages

- easy to build
- plenty of examples to copy
- can be closed in for winter use
- easy to repair

Disadvantages

- easily vandalized
- prone to fire
- stove in the middle may get in the way

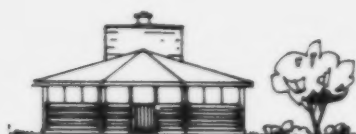
PRECAST CONCRETE



- relatively vandal proof
- low maintenance
- quick, prefab construction
- variety of finishes
- long lasting

- more costly than wood frame
- harder to repair than wood building

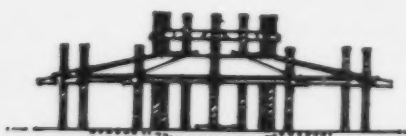
OCTAGONAL



- spacious, uncluttered floor plan
- a substantial building, adaptable for variety of uses (i.e., outdoor classroom, warm-up shelter)
- can incorporate large fireplace

- more complicated construction
- relatively expensive

GAZEBO TYPE



- can have central fireplace
- low maintenance
- users always visible
- wide variety of designs
- hard to vandalize
- can roof over a large space at low cost

- not designed to be closed in
 - open to the elements
-



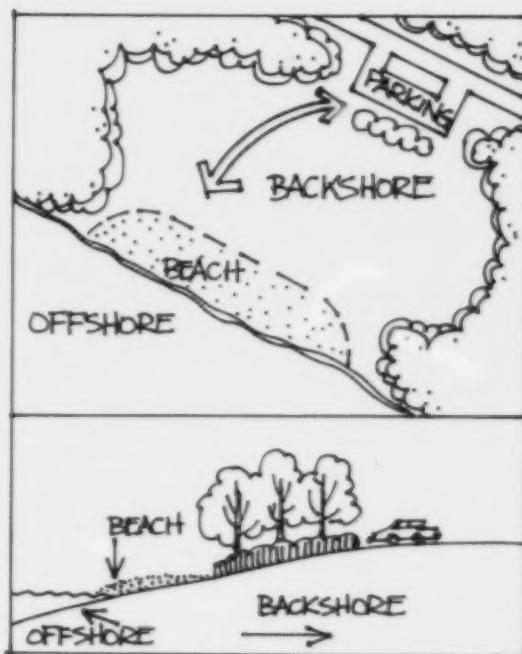
Beaches

Beaches are the main attraction in many parks. Often they're the reason the park is there in the first place! Beaches are used for swimming, for sunbathing, for boatdocking, shorefishing and water skiing - uses that often conflict with one another. As sensitive environments in their own right, and as the focus of a lot of activity, beaches deserve special consideration during all phases of park development, including the design and construction phase.

Beach Basics

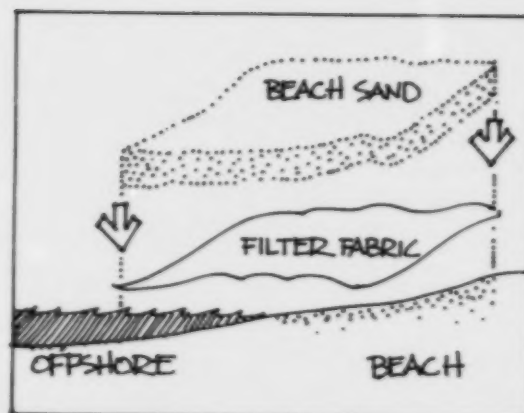
- . Think of the beach as having an *offshore* and a *backshore*.
- . A good backshore area is required to support use of the beach with parking, pedestrian access, picnicking, and visitor services.
- . The usable offshore for most swimmers extends out to a water depth of 1.2 - 1.5 m. It should have a smooth gentle gradient with no sudden drop-offs or potholes.

- . Separate beaches from the conflicting uses of boating and water-skiing. Mixing these activities causes major hazards.
- . Public vehicles should not be allowed on the beach. Putting roads and parking areas at the rear of the backshore avoids contamination, preserves shoreland quality, and achieves the maximum space for people to use.
- . A natural sand dune area can be seriously damaged by pedestrian traffic. Boardwalks and wood stairs can bridge these sensitive areas and provide access between the backshore and the beach.
- . Locate boating areas downwind or down current from beaches so that water contaminants float away from swimming areas.



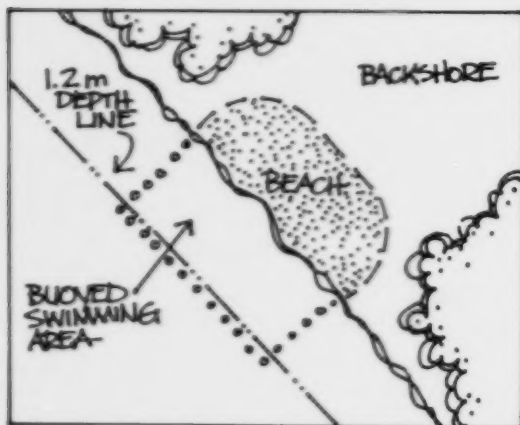
BACKSHORE DEVELOPMENT SUPPORTS BEACH USE.

- . Use walking trails to link the beach to other major activity areas such as campgrounds.
- . A poorly drained backshore breeds biting insects.
- . Find out about the seasonal cycle of your beach and offshore and design for it. Consider:
 - . water fluctuations
 - . algae blooms
 - . ice shove and scouring
 - . swimmer's itch and bloodsuckers
 - . water current and prevailing wind direction
 - . weed growth
 - . water quality (odour, colour, taste, is it safe to drink?)



FILTER FABRIC AND SAND LAYERS CAN IMPROVE OFFSHORE AND BEACH CONDITIONS.

- . For a good recreational beach:
 - . remove weed accumulation and natural debris.
 - . disc and level beach.
 - . rake beach by hand or use harrow to remove buried litter and large stones, and to break up sand compaction.
 - . remove heavy accumulation of material by front end loader.
- . Offshore areas can be improved by removing large rocks and weeds, and grading to a water depth of 1.2 - 1.5 m. If the lake bottom is firm, 200 - 250 mm of fine sand can be put down. A mucky or soft bottom may require a filter fabric underlay between the lake bottom and the sand. A filter fabric permits drainage but discourages plant growth. Filter fabric can also be used under beach sand.
- . If using a filter fabric, make sure it stays covered with a sufficiently deep layer of sand.
- . Shallow ditches can be dug along the sides of the beach to improve drainage.
- . Locate toilets 30 m back from the shore to prevent environmental contamination.
- . Check with the provincial fish and wildlife department to see what boating restrictions are in effect on your lake. Boating restrictions help minimize conflicts among competing users but they take time to legislate.



MAKE SURE THE SWIMMING AREA IS SAFE.

- . Buoys can be used for swimmers' safety in areas where there may be conflicts between boaters, waterskiers and anglers, or where there are drop-offs or other hazardous offshore conditions. Know your legal liability when marking off a swimming area.
- . Aquatic weeds should be removed mechanically whenever possible. If chemical treatment is required, it should be applied in the spring or early summer by a licensed applicator. Chemical applicators must have liability insurance in case of public or environmental damage. Commercial firms have the expertise and insurance for this type of work.
- . Contact the provincial environment department before removing aquatic weeds or before making any changes to the bed or shore of a water body. Permits may be required.



Campgrounds

Campgrounds must accommodate people using different kinds of recreational equipment, from tents to motor homes, for periods ranging from one night to several weeks. The basic unit of the campground is the campsite which contains:

- . a vehicle space
- . some open space
- . a picnic table
- . a campstove

The following development is usually required to support campsite use:

- . campground roads
- . toilets
- . garbage containers
- . firewood supply
- . drinking water supply
- . vehicle barriers
- . campsite marker post

There are many variations on the basic campground. Many campgrounds also include camper registration stations, showers, walking trails, campsites with electrical, water and sewage hook-ups, and sewage dumping stations. Local needs, traditional patterns of use, the site itself, and your budget will largely determine what kind of campground you build.

Since campgrounds cost a lot, now is a good time to return to existing campgrounds in your area and meet with local park managers. You may discover, for example, that what you really need is fewer campsites but a higher level of service, such as showers. Or, you may find that local parks are highly regulated environments, and what people may really want is to be able to camp in a *primitive* way close to the water. Look, talk and investigate before you build.

Here are two interesting observations on campers using government-run parks:

- . The average peak season *party size* at a campsite is about three (the number of people sharing one site at one time).
- . One out of five campers is travelling and camping with another party.

Find out the patterns of use in your own area. They may be quite different.

The average length of stay in a campground is also important, but this varies depending on what your park and surrounding area have to offer.

Even small parks can be holiday destinations where campers stay for a week or more. These parks are often next to major resource attractions, such as larger parks or good recreational lakes. Other parks, next to main roads, are used for one night by people on their way somewhere else. How the campground is used and how long people tend to stay will affect what you build.

Consider the following before layout and construction begins:

- . What attracts campers to the park? What will they do there?
- . What do nearby campgrounds have to offer?
- . How long will people stay and what types of support facilities will they need?
- . Will many people be travelling with more than one party and will large groups want to camp together?

Operation of the campground must also be considered during the design stage, before construction begins. Consider the following:

- . Will the campground (or parts of it) be open or closed during the winter?
- . Will there be a charge for camping and, if so, how will it be collected?
- . How will sewage and garbage be removed and how will the park be routinely cleaned?

- . What provisions have been made for visitor emergency services and law enforcement?

The answers to these questions will help you to decide whether you need to: build campground loops that are easily closed during the off-season; build a camper self-registration station for each campground loop; provide an emergency telephone and nightlight; put up a park sign showing the location of the closest sewage dumping station. These are only examples meant to show how essential these questions are. Be sure you think ahead to how the campground will operate, before you build.

The next section describes the BASICS of building campgrounds. Tips are given on: site selection, road and campsite layout and construction, and providing visitor services. DETAILS are also given for designing six types of campsites.

- . single
- . double
- . drive-through
- . walk-in
- . serviced
- . group

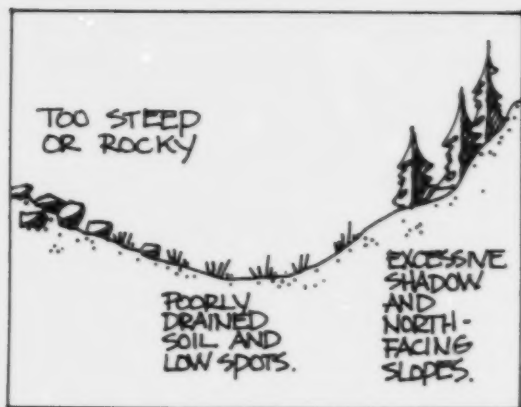
Campground Basics - Site Selection

- . Prospective campgrounds should be well-drained but not steeply sloped. Road and campsite construction on steep slopes requires expensive grading, cutting and berming, and is not usually practical.



GENTLY-SLOPED AREAS CAN MAKE GOOD CAMPGROUNDS.

- . Avoid low areas that will require fill. Low areas drain slowly and ponded water can kill vegetation or form mud holes.
- . North facing slopes tend to be wet and cool and do not make ideal campsites.

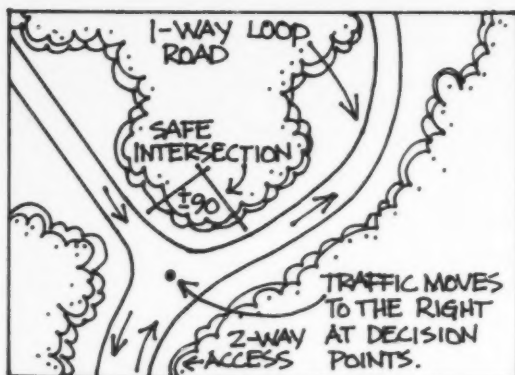


SOME CAMPGROUND CONDITIONS TO AVOID.

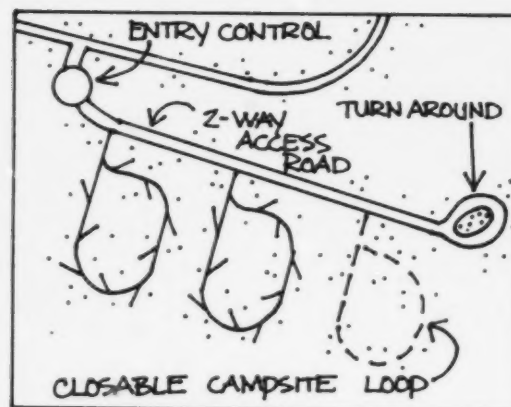
- . Take advantage of existing natural conditions on the site by incorporating clearings, small gaps in tree cover and cut-lines into the campground design.
- . Many surfaces are suitable for campground development. The best campground topsoil is a loam or sandy loam with not much gravel, at least 150 mm thick. High clay or organic soils are easily compacted and drain poorly.
- . A lack of shrubs and smaller trees may indicate an unhealthy or overmature forest. A good understory of shrubs contributes to campground privacy and reduces the creation of random trails.
- . Campgrounds can be selectively cleared after roads and campsites are in. Remove potentially hazardous trees. Selective cutting opens up the campground to let in more light, easing the sense of claustrophobia in dense forest. Consult a district agriculturalist, nursery worker, horticulturalist, forester, or other expert to help you prepare and manage campground forest for recreational use.
- . Locate on-site water sources before laying out the campground. Think of using a water witch or dowser.
- . If bears are a problem, find out more about them from local park managers. You may want to avoid campground development:
 - . near prime berry patches,
 - . close to creeks and streams (a 30 m setback may not be enough),
 - . near well-used animal trails,
 - . near denning areas,
 - . close to garbage dumps.

Campground Basics - Roads

- . Campground road systems should be simple and easy to understand. Avoid creating a maze! Road development should be kept to a minimum.
- . Plan the campground according to the lay of the land. Lay out roads and sites parallel to the slope rather than across it.
- . Public use can be better controlled by building campgrounds that have one point which all traffic must pass - a shared entrance and exit.
- . Campgrounds with numerous campsites should have several campsite loops. This permits periodic closure of individual loops during off-season low use periods, and decreases the amount of traffic going past each campsite.
- . Campsite loop roads should be one-way with traffic moving to the right. One-way roads take up less width, reduce traffic going past campsites, and are safer for visitors to use.



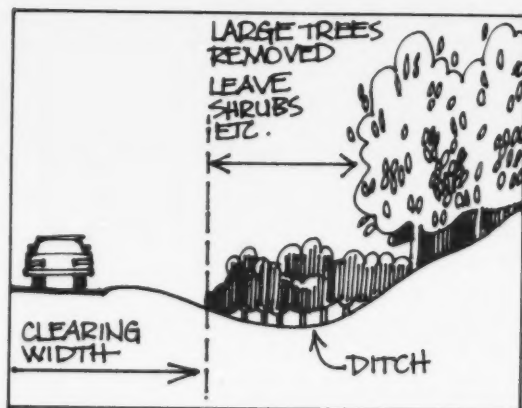
PLAN SAFE, EASY-TO-UNDERSTAND CAMP-
GROUND ROADS.



THINK OF PROVIDING VEHICLE TURNAROUNDS
AND LOOPS THAT CAN BE CLOSED.

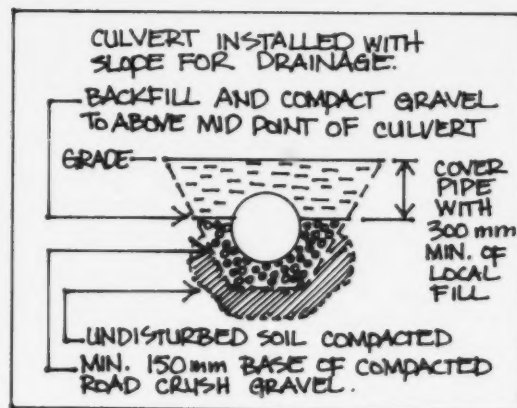
- . Roads must be safe. The best intersections for turning and seeing in both directions are at 90°. Avoid long, straight campground roads. They encourage unsafe driving.
- . Road curves, turnarounds and all clearing widths must be designed for the largest vehicles using them - usually large R.V.'s and vehicles towing trailers.
- . A good way to lay out campground roads is to drive an R.V. around the route (terrain and vegetation permitting!). Mark the route as you go, using wood stakes flagged with bright ribbon or tipped with paint.
- . Dead-end campground roads must have a vehicle turnaround provided. Avoid having the last campsite used for turning around.

- Keep clearing widths for campground roads to a minimum: usually about 6 m for a one-way and 8 m for a two-way road. Larger trees (150 mm or 6" diameter) can be removed in a zone to either side of the cleared road to help prevent deadfall.



DITCHES AND ROAD CLEARING WIDTHS.

- Road layout and construction should maintain existing drainage patterns when possible. Use ditches and culverts to control drainage and slant or crown roads to remove rainwater and melting snow.
- Install culverts before putting on the road base and surface.



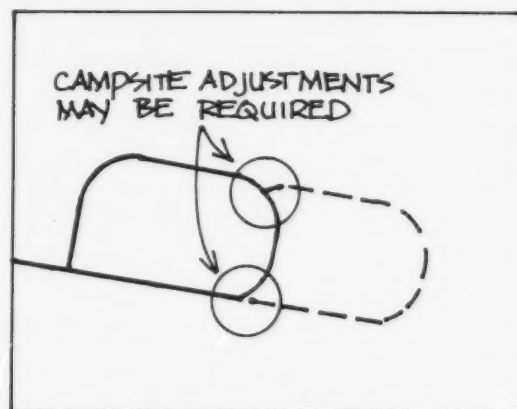
INSTALL CULVERTS BEFORE SURFACING ROADS.

- The roadbed should be cleared, roots grubbed and topsoil removed. The topsoil can be used for reclaiming the site after construction. It can also be spread on areas where existing soil has been heavily compacted.
- Try to avoid building roads where the organic material is deeper than 1 m. If this can't be avoided, don't strip this material off but compact gravel over top of it.
- A good road base can be made with a compacted 100-150 mm lift (layer) of pit run or 20 mm diameter road crush gravel.
- Surface roads with a minimum 50 mm lift of 20 mm diameter washed gravel or crushed gravel.

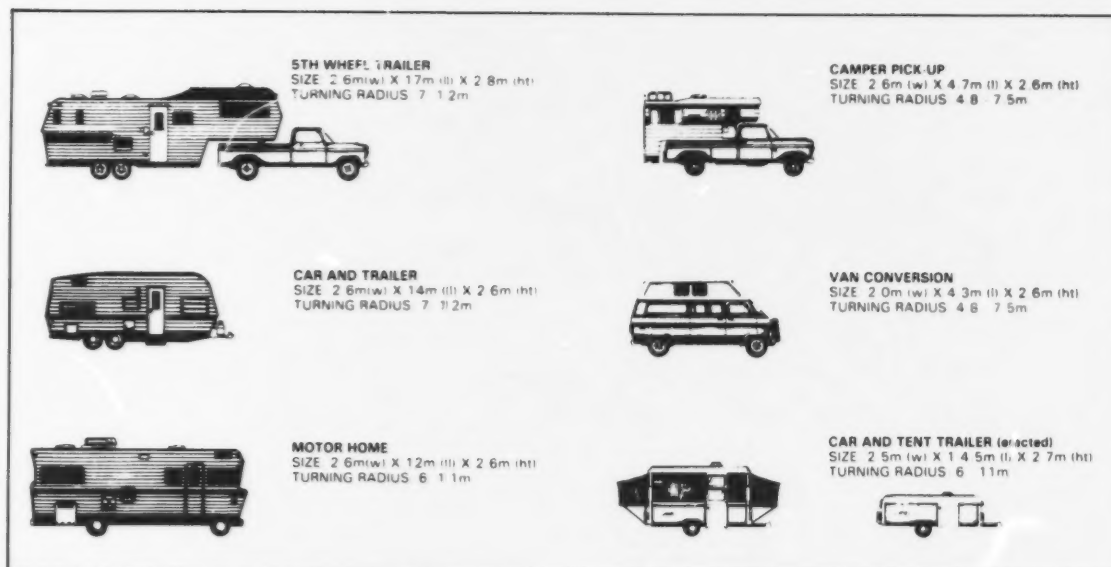
Campground Basics - Campsites

- . Remember to provide variety in your campground. Have a mixture of campsites instead of all one kind.
- . There is no set standard for campsite spacing. It varies according to the natural conditions and the number of sites desired. Leaving 15 m - 30 m between campsites is typical in many parks where the natural environment is an important attraction. Closer spacing can be used in high density urban-type campgrounds or in R.V. parks where closer spacing may mean higher profits.
- . Campsites should be spaced for privacy, to reduce conflicts among campers, and to ensure that each campsite has sufficient room. A space should also be left between campsites and the road. About 5 m would be ideal.
- . Don't crowd campsites on a curve. Maintain safe back-in angles.
- . Think about making one campsite per loop accessible to the handicapped. It should have an extra-wide back-in spur, a firm activity pad surface, and be close to a handicapped-accessible toilet. Special tables and stoves should also be used.

- . Resist the urge to increase campground capacity by adding campsites into existing loops. Overdevelopment of a small area can lower the quality of the whole campground. Adding new loops or building campground extensions is preferable.
- . Establish the need for additional campsites by operating for a season or two. Proven popularity can make it easier to put expansion plans into action.



CAMPGROUND EXPANSION BY EXTENDING A LOOP



KNOW WHAT'S COMING WHEN YOU BUILD A CAMPGROUND.

- . Install barriers to restrict vehicles to roads and parking areas, and to keep them off campsite activity pads. Barriers must be functional and vandal-proof.
- . Campsite spurs can be built the same as campground roads: a compacted base of pit run gravel surfaced with clean gravel.
- . Clear campsite activity pads by hand. Grub roots and remove large stones. Locate campsites to take advantage of the best drained, most durable soil conditions. The less you have to do to the campsite, the better!

Campground Basics - Visitor Services

- . Build visitor services into the design rather than adding them as an afterthought.
- . Visitor services usually include: toilets, garbage containers, firewood, and drinking water supplies. Clustering these services together at one or more locations makes them very convenient for campers to use and efficient for park staff to maintain.
- . Visitor service clusters should be located to minimize trail development, for visibility, and to reduce disturbance to other campers. Locations near the road will make for easy servicing, and will encourage people to use the road as an access trail.



CLUSTER VISITOR SERVICES FOR USER CONVENIENCE AND MANAGEMENT EFFICIENCY.

. Visitor services should be located within easy walking distance of all campsites.

. In many campgrounds, toilets are provided according to this formula:

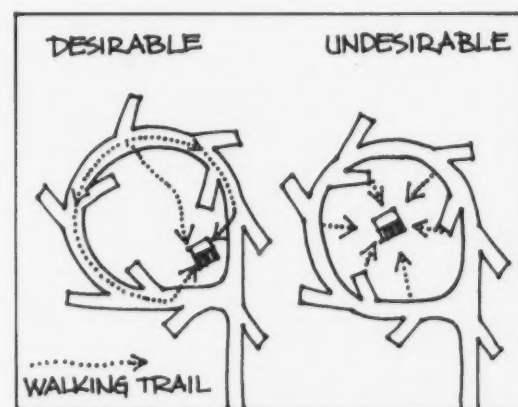
two seats for every
15 campsites

Usually there is no need to have separate toilets for men and women - unisex toilets are adequate.

. Keep water sources and toilets well-separated if located in the same visitor service cluster. A 30 m separation is ideal.

. Provide enough pull-over space at visitor service clusters so that a service vehicle will not block traffic.

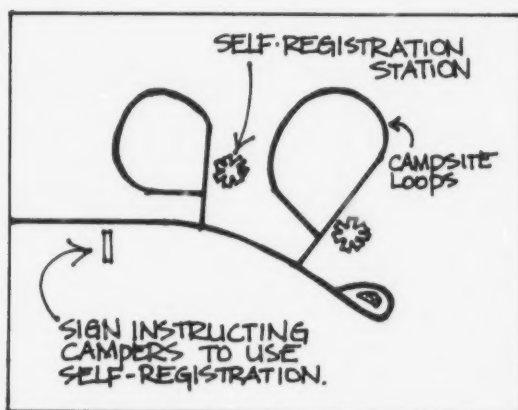
. Give careful consideration to pedestrian traffic when designing the campground - people take the easiest path. Trail development may be required to provide access to visitor service clusters and to link the campground with other nearby activity areas. Keep trail development to a minimum, incorporating campsite loop roads when possible. Trails should be wide enough for two people and be free of hazards for nighttime access to visitor services. Trails should be easily accessible from all campsites without crossing through any of them.



CONSIDER PEDESTRIAN ACCESS WHEN LOCATING VISITOR SERVICES.

. Build camper registration needs into the design. If self-registration stations are required, they should be prominently located near the entrance to each campsite loop, usually on the right side of entering traffic. A vehicle pull-over or several adjacent parking spaces may be required

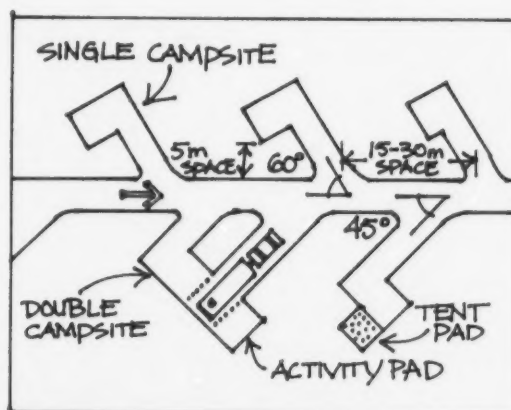
for larger campsite loops. The area around the self-registration station must be safe for pedestrians. Self-registration stations may also be included in a visitor services cluster. A sign should be posted alerting campers entering the campground that self-registration is in effect.



CAMPERS CAN REGISTER THEMSELVES.

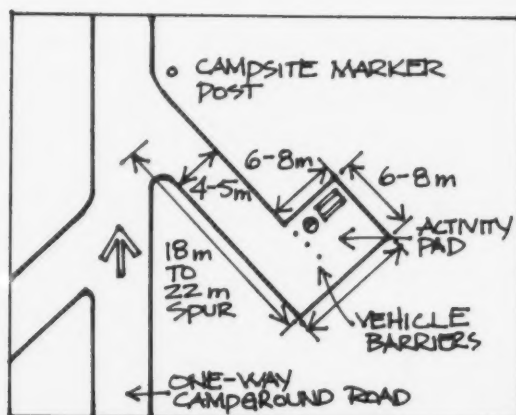
Campground Details - Single Campsite

- . In most campgrounds the highest percentage of campsites will be single back-in sites.
- . Campsites should be easy to back into. Back-in spurs are usually placed at a 45-60° angle from the centre line of the road.

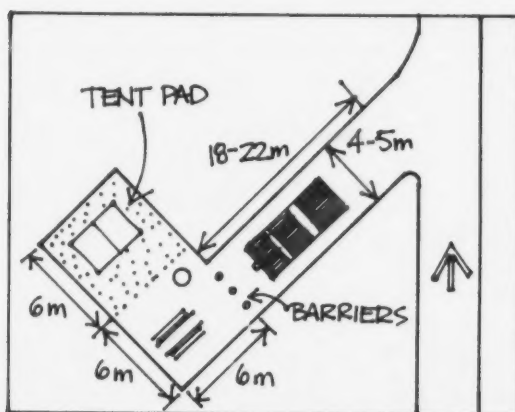


SINGLE CAMPSITE SPACING AND BACK-IN ANGLES.

- . Campsite spurs 4 m wide and 18 m long will accommodate most R.V.'s. A level open area about 6 m x 6 m in size is required for a campstove and picnic table. Larger activity pads are required for pitching tents.
- . Activity pads are usually built to the right or rear of a parked vehicle. The spur angle on the left of a one-way road should be about 60° to provide enough space between the road and activity pad.
- . Activity pads located to the rear of the campsite spur are for the convenience of campers with camper trucks and other rear door R.V.'s.



SINGLE BACK-IN CAMPSITE DESIGN.

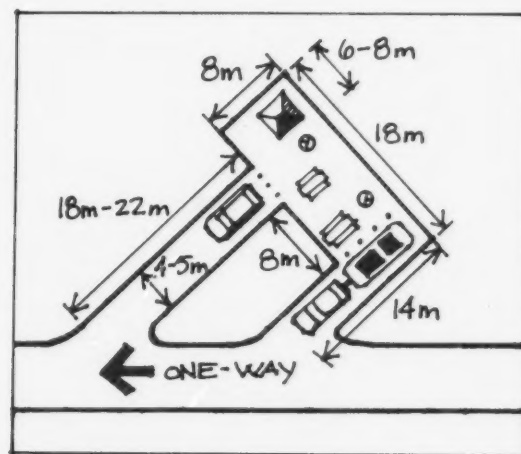


CAMPSITE LOCATED AT REAR WITH TENT PAD PROVIDED.

Campground Details - Double Campsite

- . Provide double back-in campsites for the one out of five campers that travel and camp with another party.
- . Doubles should also work as single campsites; each has its own table and campstove.

- . Remember that one double counts as two singles when calculating the number of toilets and other visitor services required.

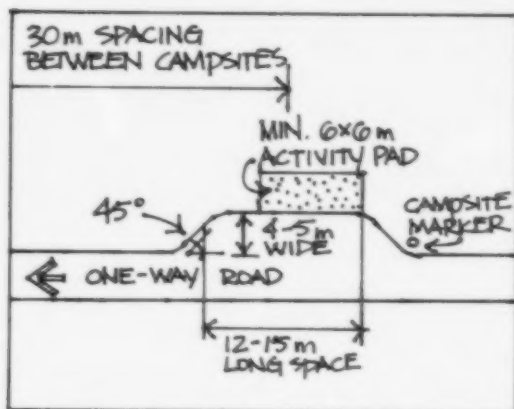


DIMENSIONS OF A DOUBLE BACK-IN CAMPSITE.

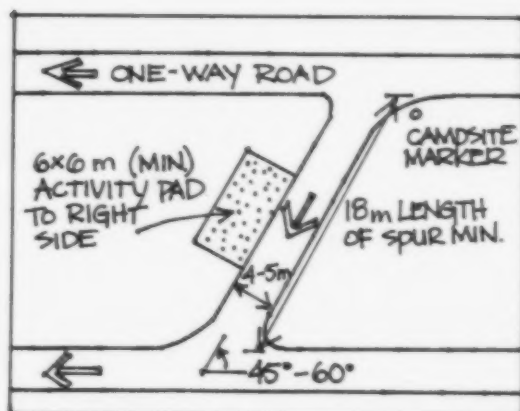
Campground Details - Drive-Through Campsites

- . Anticipate large R.V.'s and trailers by including some pull-through and pull-over campsites in each campground loop.
- . Pull-over campsites accommodate large R.V.'s and vehicles towing trailers. They can be used where space is limited.
- . Pull-over campsites must be located to the right of traffic flow. Remember, R.V. doors are located on the passenger side.
- . Short-cutting curves with pull-through campsites doesn't work well. Activity pad space is too limited, and an unoccupied pull-through looks like a road and confuses traffic.

- Pull-through, and other campsites designed for trailers and R.V.'s, should be as level as possible to permit the operation of built-in stoves, fridges, etc.



PULL-OVER CAMPSITE DESIGN.



DIMENSIONS OF A PULL-THROUGH CAMPSITE.

Campground Details - Serviced Campsites

- Serviced campsites may not be worth the trouble, cost and maintenance responsibility. Most vehicles capable of service hookups can also operate independently for the length of most campground stays. The pros and cons of providing campsite services should be carefully weighed.

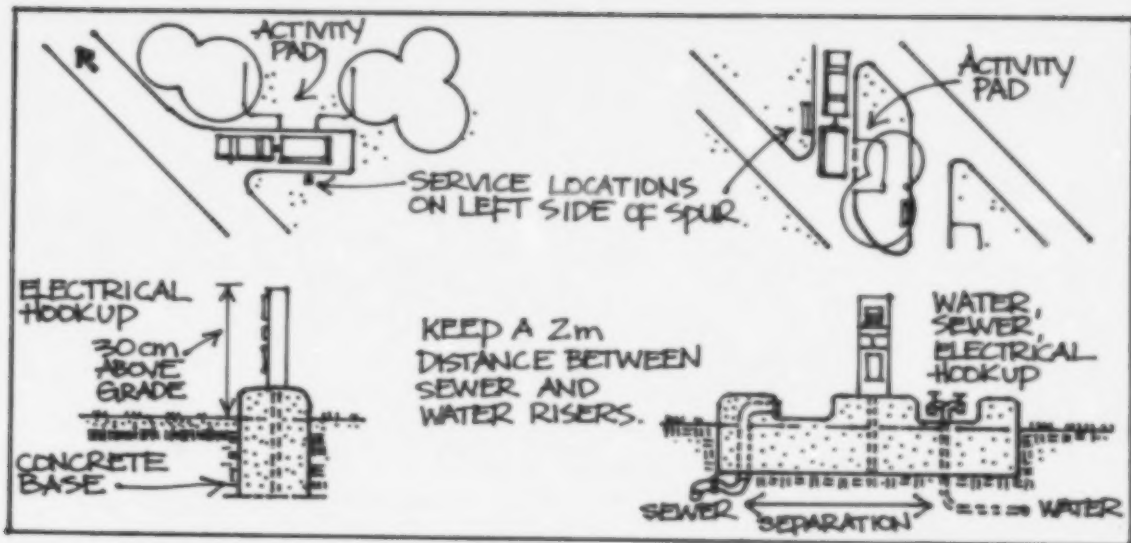
- Campsites can be individually serviced with electrical and water hookups. A sewage dumping station is almost always preferable to campsite sewer hookups, except in R.V. parks with built-in sewage systems, or where campsite sewer drains can be easily linked to existing municipal sewers.

- Serviced campsites should be located together, confined to one campsite loop if possible. Have cost efficiency in mind when laying out underground service lines. A single serviced loop can be more easily opened and maintained for winter use.

- Service hookups should be installed on the left side of campsite spurs.

- Electrical hookups are best suited to campgrounds where R.V. campers stay for long periods of time or where winter camping is popular.

- Electrical services should be installed by an electrical contractor and, in Alberta, must conform to the provisions of the Electrical Protection Act and Regulations.

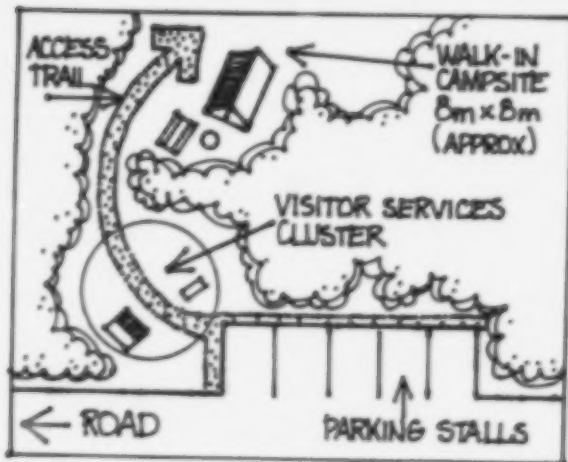


LOCATION AND DETAILS OF CAMPSITE SERVICES.

- Water and sewer hookups in Alberta must conform to the requirements of the Provincial Board of Health, Standards and Approvals of Alberta Government, and the Regulations under the Plumbing and Drainage Act.
- Parks Canada electrical hookups provide one 15A (1700W) duplex or one 15A duplex and one 30A (3400W) duplex outlet.
- Several parks agencies recommend a 2 cm (3/4") nominal swivel hose connection for water hookups at a water pressure of from 20 to 75 psi. All water supply hose bibs must have backflow protection.
- Sewer hookups use a 7.6 cm (3") threaded sewer ferrule and plug and must be separated 2 m or more from the water riser.

Campground Details - Walk-In Campsites

- Walk-in campsites can be built in areas where vehicle access is not desired or practical due to site conditions.
- Walk-in campsites can have as much or more impact on the environment as vehicle accessible campsites.
- Walk-in campsites require walking trails to connect them with a nearby parking area.

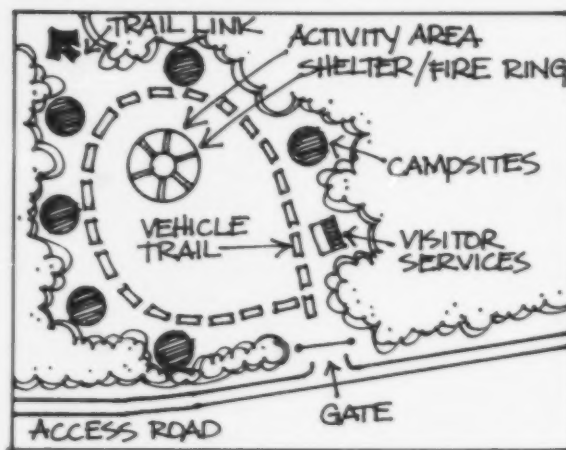


WALK-IN CAMPSITES NEED VISITOR SERVICES AND PARKING.

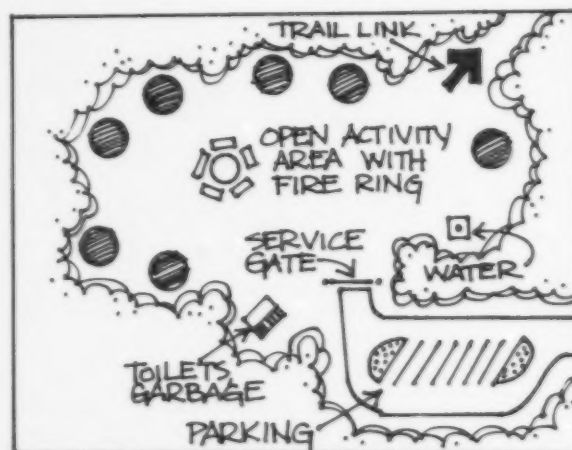
- . Provide about 1.5 parking stalls for each walk-in campsite.
- . Each campsite usually includes a table, campstove and tent space, and is located close to garbage containers and toilets - close enough so that campers won't be tempted to use the bush.
- . Campsites require a level activity pad about 8 m x 8 m or 4 m radius in size.
- . Walk-in campgrounds should have a sign posted at the parking area. The sign should:
 - . ask campers to lock their vehicles.
 - . remind visitors of their special responsibilities as off-road campers (to pack out all garbage, to protect the natural qualities of the site, to use the toilets, etc.).
 - . show campground layout, and location of visitor services.

Campground Details - Group Camping

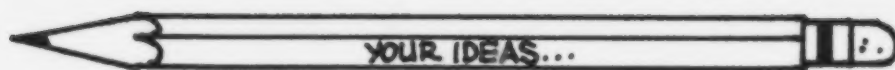
- Group camping usually requires an area sufficient for approximately six to twenty campsites, and a large, central, open activity area. Vehicles can be confined to an adjacent parking area or allowed access to the site. Vehicle access should be controlled by a lockable gate.
- Group camping areas should be linked by walking trails to picnic areas and park attractions.
- Group camping areas should be well-separated from other camping areas and should have permanent or temporary toilets and garbage containers. A water and firewood supply may also be required.
- Campsites should be located around the edge of an open activity area. Each site should be provided with a portable picnic table. Campstoves can be provided for every one or two campsites. Smaller group camping areas can rely on one large central fire ring instead of separate campstoves.
- A large fire ring and roofed shelter in the central activity area will serve as a focal point for group activities.
- Group camping areas are best managed by advance booking. Group camping areas can also be used for overflow camping during peak use periods.



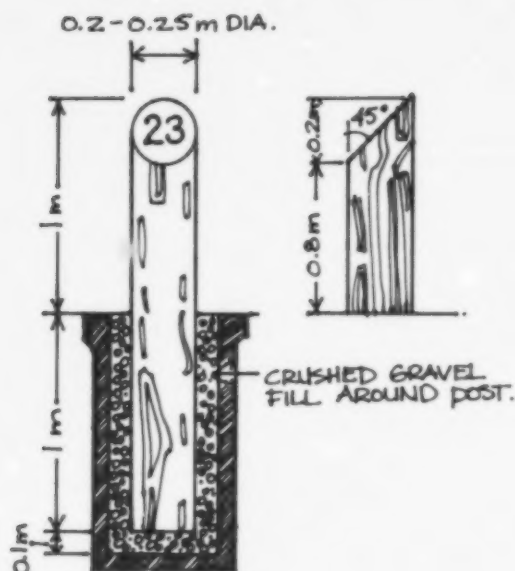
VEHICLE ACCESSIBLE GROUP CAMPING AREA.



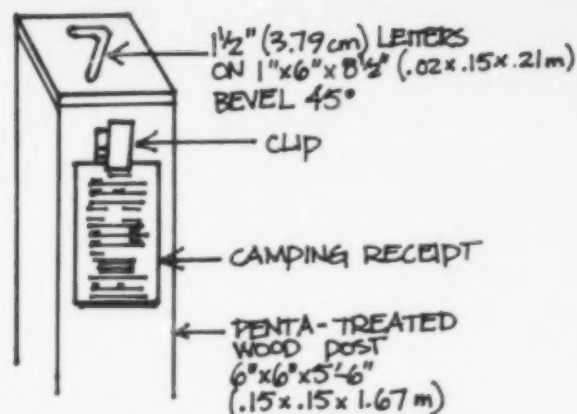
WALK-IN GROUP CAMPING AREA.



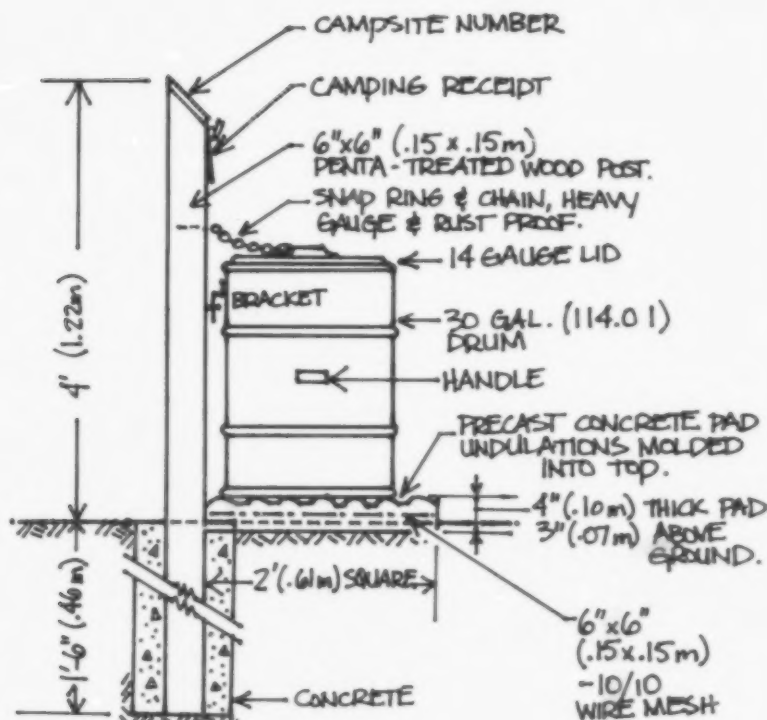
CAMPSITE MARKERS



STANDARD CAMPSITE MARKER POST



MARKER POST WITH CAMPING RECEIPT HOLDER



COMBINATION MARKER POST AND GARBAGE CAN HOLDER

SOME TIPS...

- CAMPSITE MARKER POSTS SHOULD HAVE THE NUMBER FACING ONCOMING TRAFFIC.
- NUMBERING CAMPSITES IS A WAY OF TELLING OTHERS WHERE YOU'RE LOCATED.
- CAMPGROUNDS THAT CHARGE CAMPING FEES HAVE NUMBERED CAMPSITES.
- MARKER POSTS CAN DOUBLE AS GARBAGE CAN HOLDERS.

VEHICLE BARRIERS

ROCKS

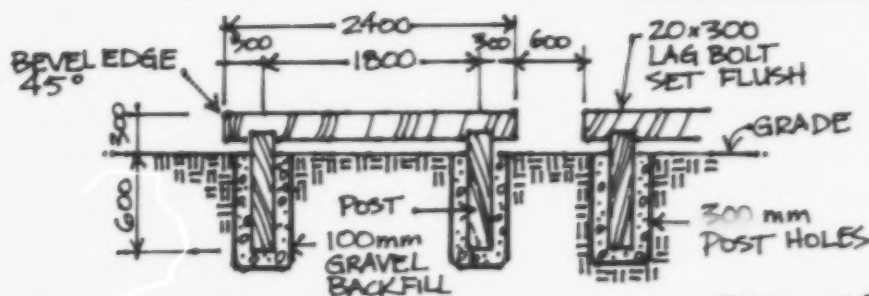


APPROX. $\frac{1}{3}$ OF ROCK SHOULD PROJECT ABOVE GROUND. THE NATURALLY WEATHERED APPEARANCE OF THE ROCKS SHOULD BE PRESERVED. ROCKS SHOULD NOT BE PAINTED.

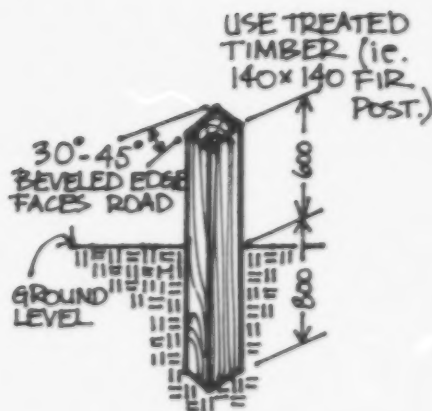
SOME TIPS...

- BARRIERS CONTROL VEHICLES AND PREVENT DETERIORATION OF PEDESTRIAN AREAS AND SURROUNDING VEGETATION. MAKE THEM HARMONIZE WITH THE SURROUNDINGS.
- POSTS SHOULD BE SPACED ABOUT 1.5m APART.
- BURY POSTS DEEPLY ENOUGH SO THAT THEY CAN'T BE EASILY PUSHED OVER OR REMOVED.
- USE A SINGLE REMOVABLE POST TO PERMIT SERVICE OR EMERGENCY VEHICLE ACCESS.

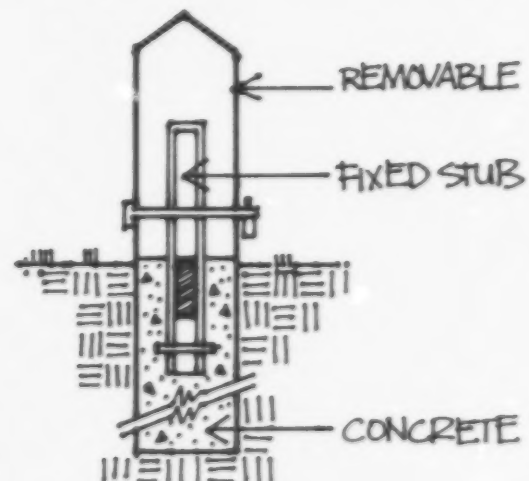
RAILS



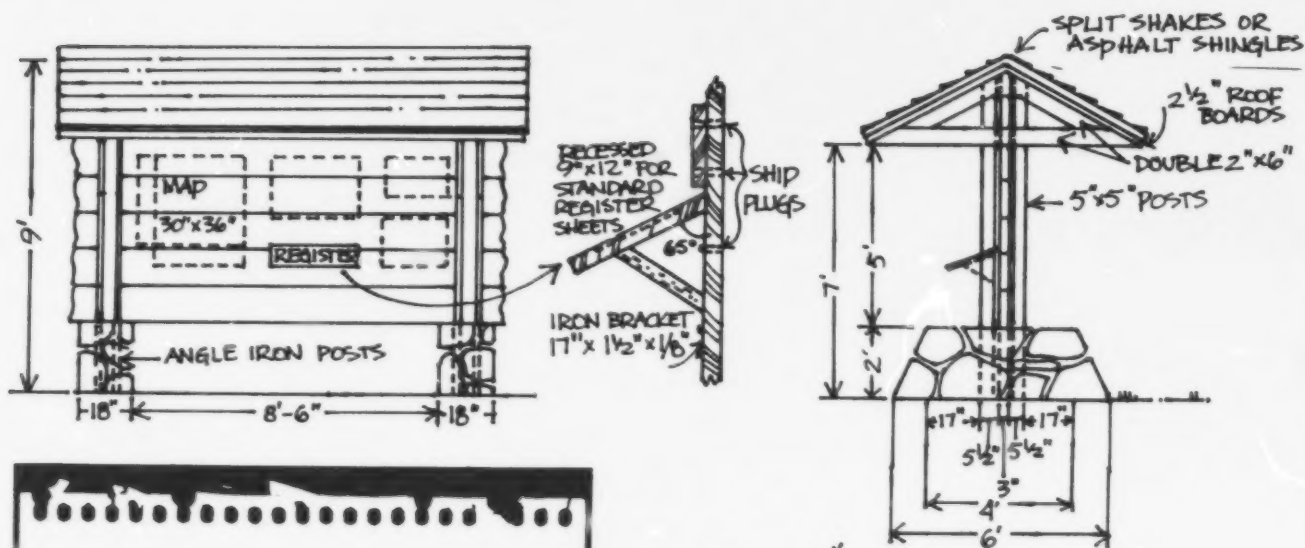
POSTS



REMOVABLE POST



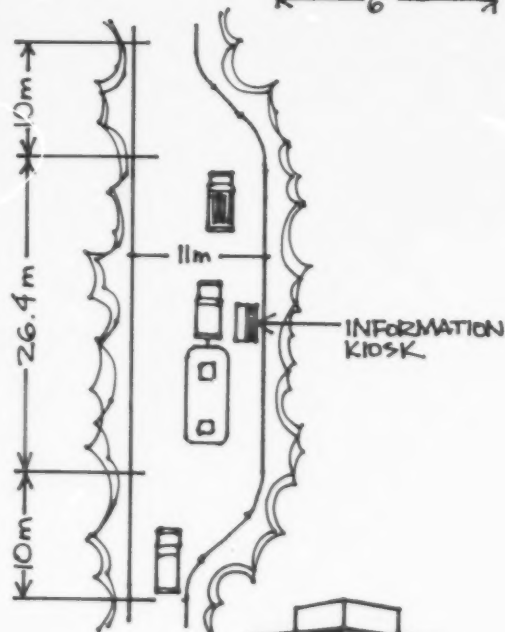
INFORMATION BOARDS



SOME TIPS...

EVERY PARK SHOULD HAVE AN INFORMATION 'CENTRE' THAT CAN:

- ORIENT PARK VISITORS.
- INFORM VISITORS OF EVENTS, NOTICES, EMERGENCY PHONE #, AND LOCATION OF FIRST AID.
- POINT OUT WHAT'S AVAILABLE IN THE AREA (GROCERIES, R.V. DUMP, GAS, MECHANIC, LOCAL ATTRACTIONS, ETC.)
- HAVE NOTES ON LOCAL NATURAL AND CULTURAL HISTORY.
- LIST GUIDELINES FOR PARK USE.
- SERVE AS A CAMPER SELF-REGISTRATION STATION.



SOME INFORMATION BOARD LAYOUT IDEAS:

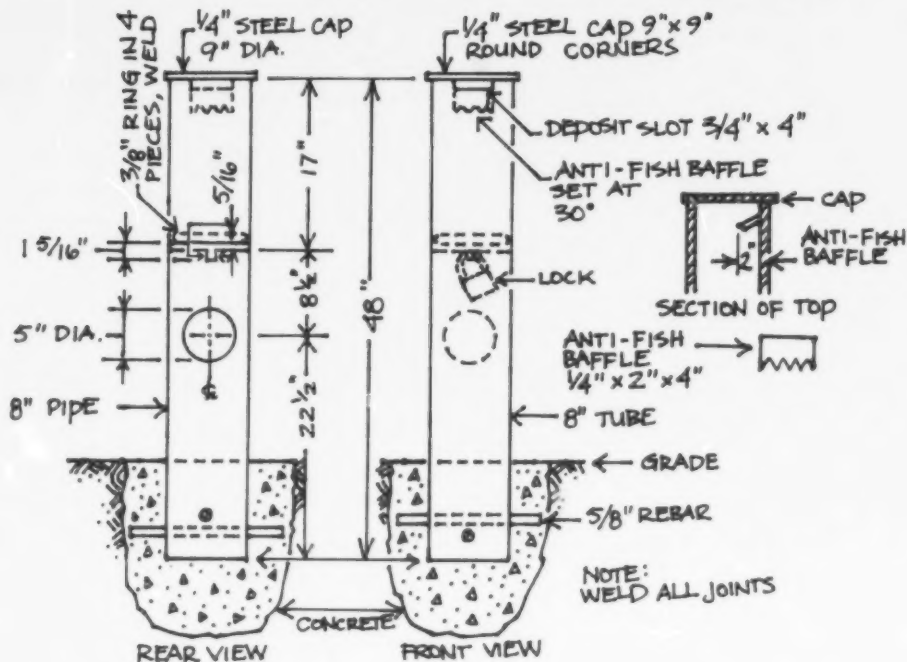


(BIRD'S EYE VIEW)

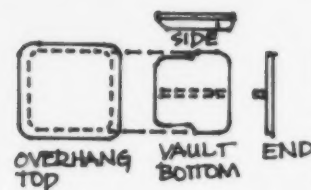


FEE CONTAINERS

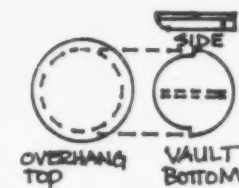
FOR SELF-REGISTRATION CAMPGROUNDS



BUILT-IN VAULT



TOP VIEW SQUARE TUBE USED.



TOP VIEW PIPE USED.

SOME TIPS ...

HERE'S AN EXAMPLE OF A SIGN POSTED AT THE REGISTRATION STATION SHOWING CAMPER'S HOW TO REGISTER:

DAILY FEE REQUIRED
 PER UNIT

TO REGISTER

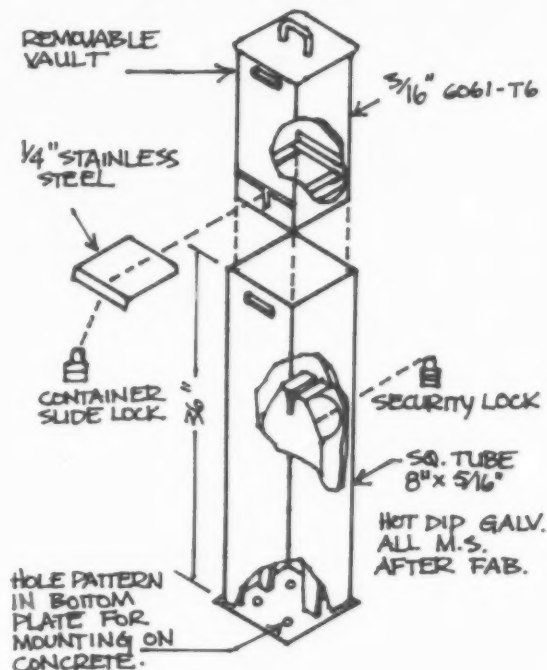
1. Occupy a vacant campsite, note the number and return within one half hour
2. Fill out information on envelope
3. Put required fee in envelope, remove stub and place envelope in deposit box
4. Retain stub as registration reference

CAMPING IS FREE FOR ALBERTA RESIDENTS AGE 65 OR OVER. BUT A PERMIT MUST BE FILLED OUT AND PLACED IN THE BOX

CHECK OUT TIME 2:00 PM

DEPOSIT HERE

REMOVABLE VAULT

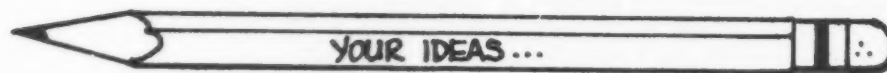


Visitor Services

Park developers must anticipate the needs of park visitors. Almost every park provides the basic visitor services: toilets and garbage containers. Other services can include: firewood and water supplies, a sewage dumping station, telephone, security night light, information board, and hot showers.

Visitor services are so essential that they have been described throughout this manual. They are part of the picnic area, part of the campground, not something separate. It's worthwhile to restate the main points.

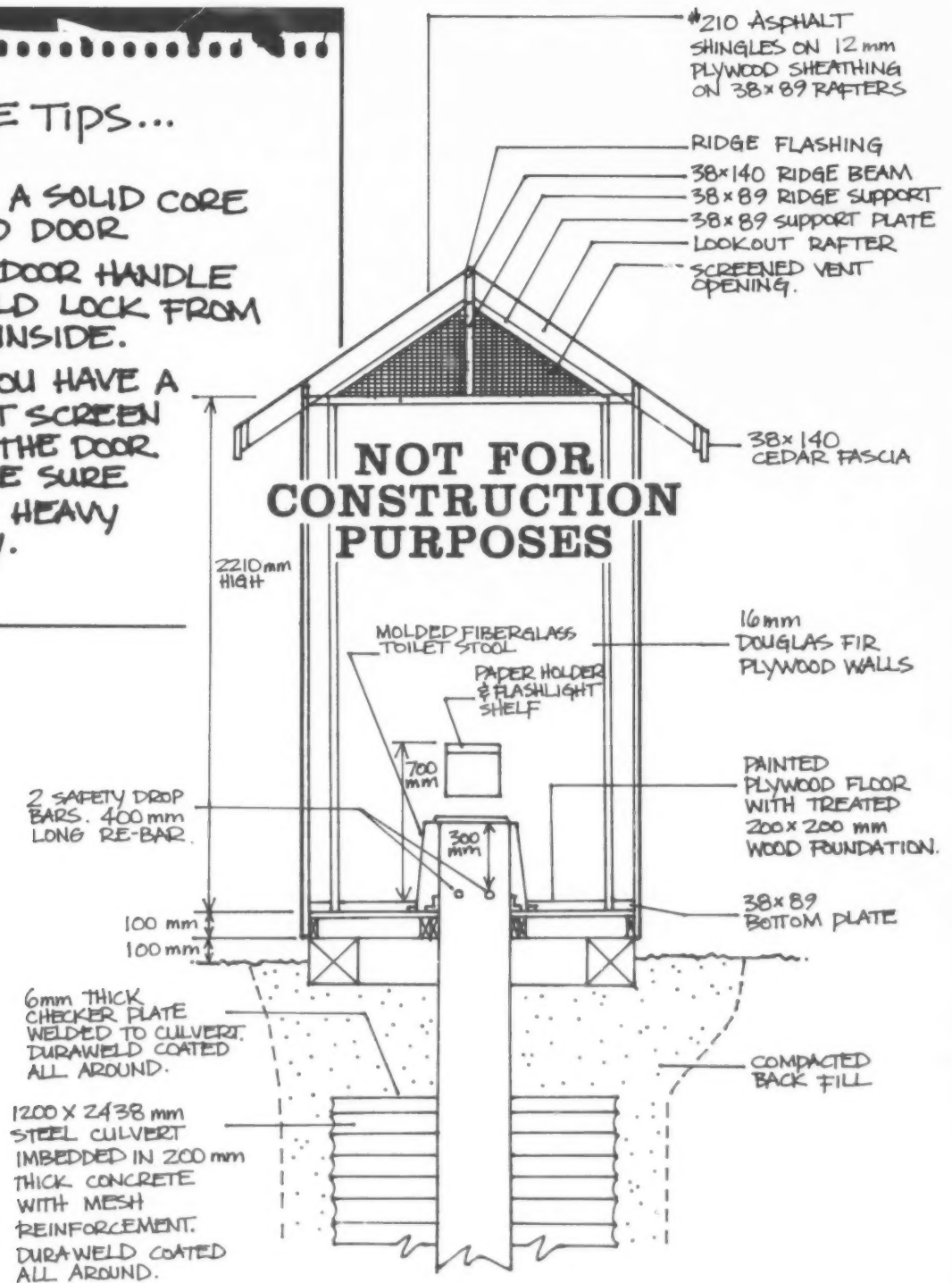
- . Begin considering visitor services during the planning phase of park development. Don't think of them as a frill.
- . Tailor the services you provide to the expected needs of your visitors.
- . If you can't afford to build all the desired visitor services at first, build the basics and add less essential services later.
- . Explore your options. Is it possible and cost effective to tie in to a municipal sewer system or water line? If you need power, should you connect with a nearby electrical line or opt for propane? Can you use local garbage collection and disposal services?
- . Build quality facilities. They last longer, work better and make your park more popular.
- . Locate visitor services for user convenience and for easy and efficient maintenance by park staff.
- . Don't underestimate the importance of toilets. Study after study has shown that the most desired attribute of a campground is a clean restroom. Camper heaven is a flush toilet, a hot shower, plenty of hot water, and a toilet stall door with a latch!
- . Watch your park development budget to ensure that top-notch visitor services can still be provided at the end of a long project.



SINGLE VAULT TOILET

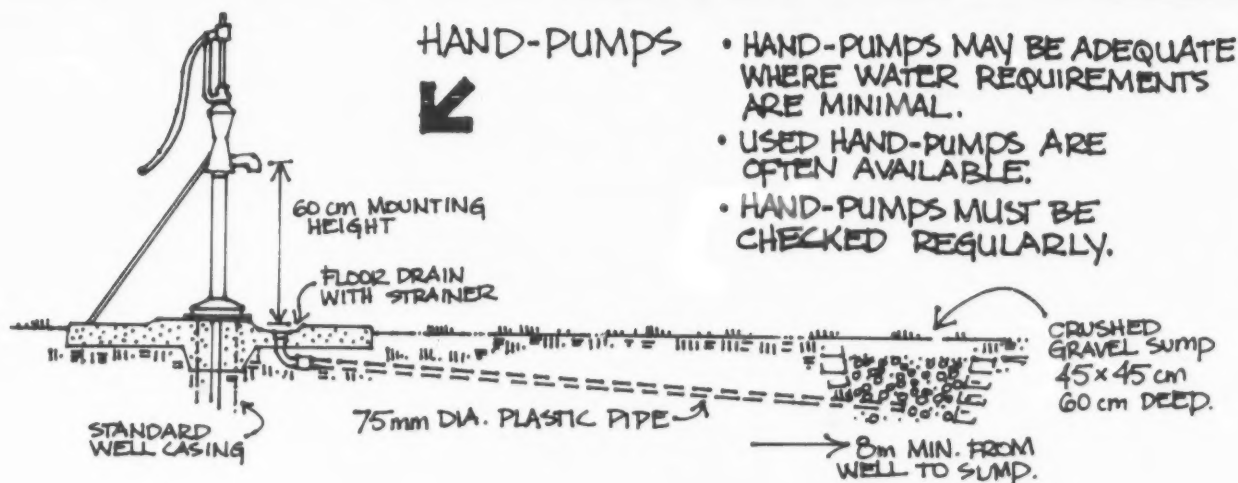
SOME TIPS...

- USE A SOLID CORE WOOD DOOR
- THE DOOR HANDLE SHOULD LOCK FROM THE INSIDE.
- IF YOU HAVE A VENT SCREEN ON THE DOOR, MAKE SURE IT'S HEAVY DUTY.

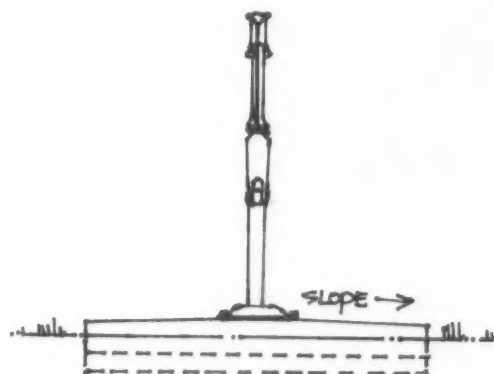


WATER SUPPLIES

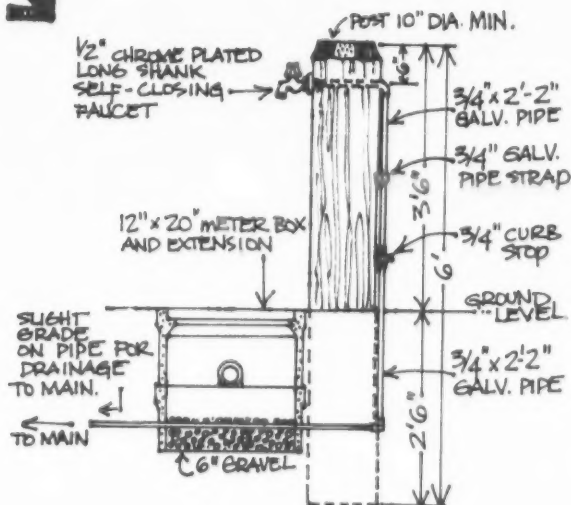
HAND-PUMPS



- HAND-PUMPS MAY BE ADEQUATE WHERE WATER REQUIREMENTS ARE MINIMAL.
- USED HAND-PUMPS ARE OFTEN AVAILABLE.
- HAND-PUMPS MUST BE CHECKED REGULARLY.

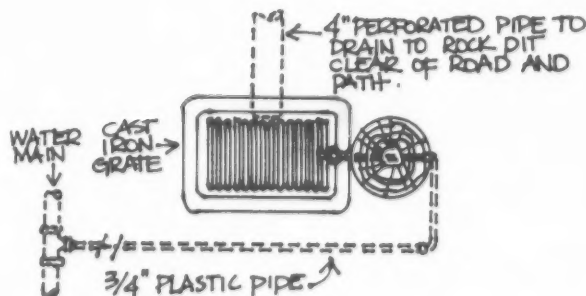


SELF-CLOSING FAUCET



SOME TIPS...

- WATER REQUIREMENTS WILL BE APPROXIMATELY 15-40 L. PER PERSON PER DAY FOR AN UNSERVICED CAMPSITE.
- PREVENT SURFACE WATER SEEPAGE INTO THE WELL.
- WELL PIPING MUST BE WATER TIGHT FOR AT LEAST 3 M BELOW GROUND LEVEL.
- THE WELL PLATFORM MUST BE BUILT TO DRAIN EXCESS WATER.
- IF USING A CISTERN, IT MUST BE BIG ENOUGH TO HANDLE PEAK WEEKEND USE.



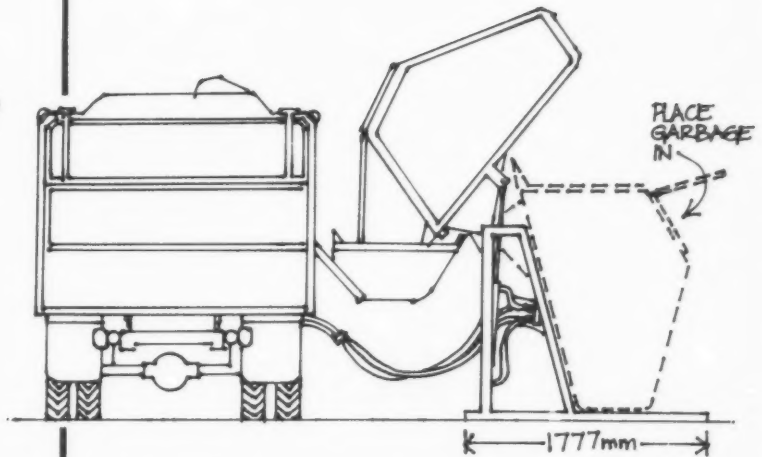
- SELF-CLOSING FAUCETS CUT DOWN ON WASTED WATER.
- STANDPIPES SHOULD BE DESIGNED SO THAT THEY CAN BE DRAINED TO PREVENT FREEZING.

GARBAGE CONTAINERS

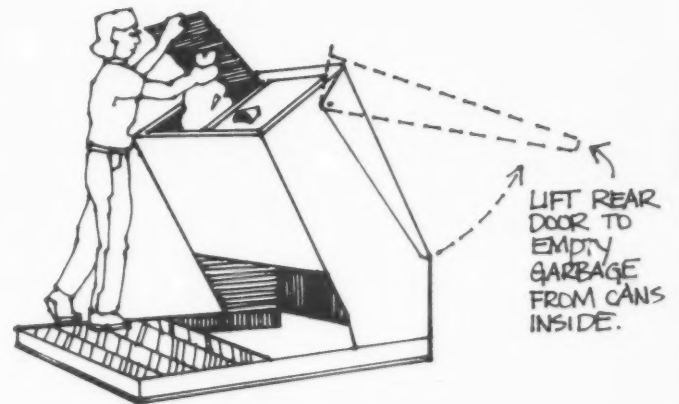
SOME TIPS ...

IS YOUR CONTAINER:

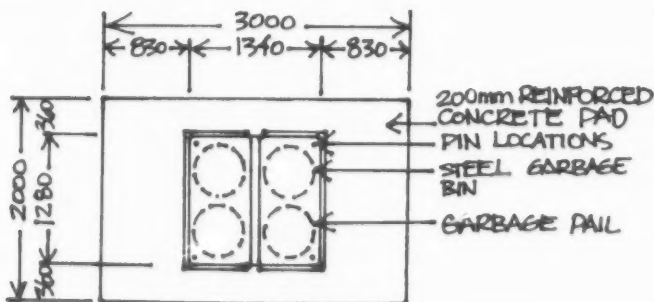
- STRATEGICALLY LOCATED?
- DURABLE?
- WIND PROOF, ANIMAL PROOF, VANDAL PROOF?
- EASY TO PICK UP, HANDLE, DUMP, CLEAN, REPAIR, STORE?
- APPROPRIATE FOR THE REFUSE IT WILL HOLD—WET DRY, GLASS, SMALL PARTICLES?
- EASY ENOUGH FOR A CHILD TO USE?
- COMPATIBLE WITH COLLECTION AND DISPOSAL EQUIPMENT?



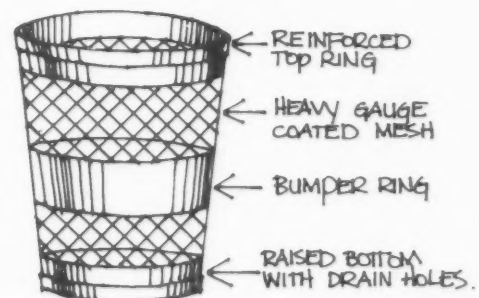
SELF-DUMPING GARBAGE BIN USING HYDRAULIC LINES.



FACTORY-MADE 2 BAG CONTAINER



EXAMPLE OF A STAND HOLDING 4 GARBAGE CANS.

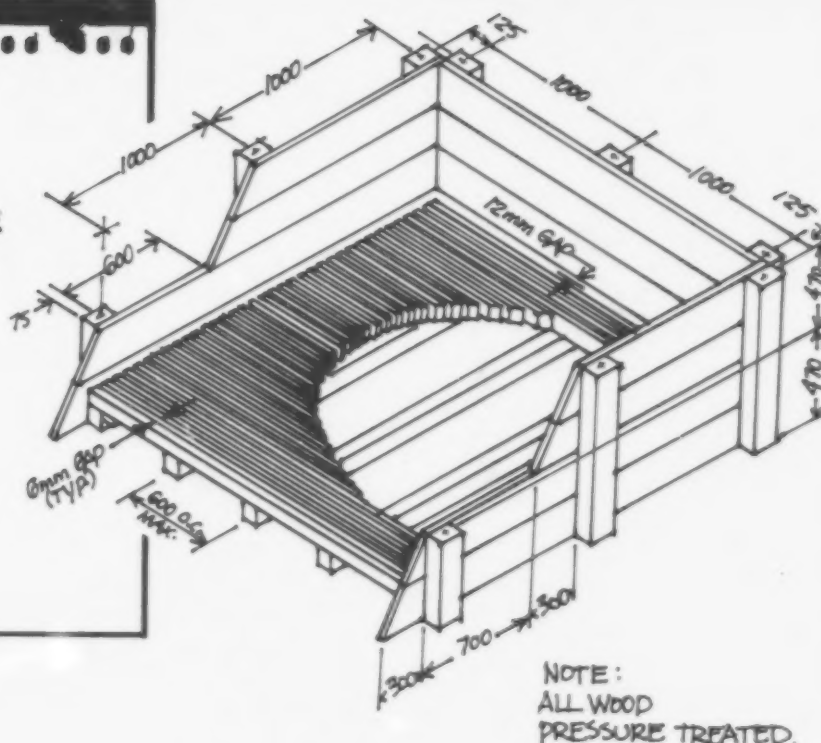


THE IDEAL GARBAGE CAN.

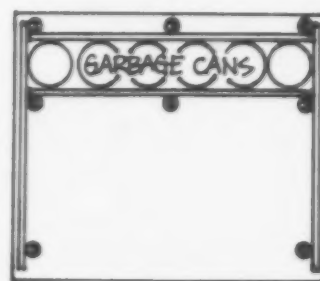
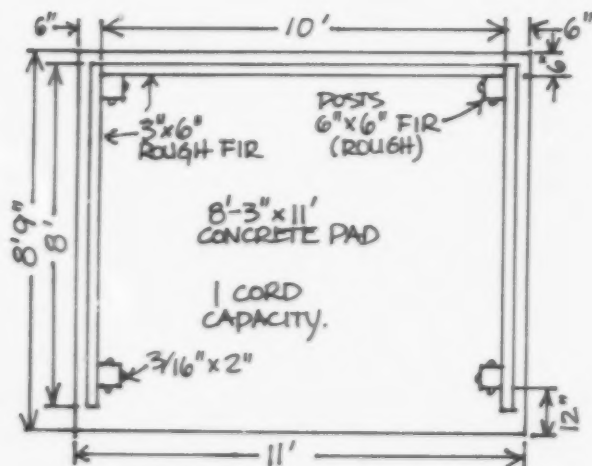
FIREWOOD HOLDERS

SOME TIPS...

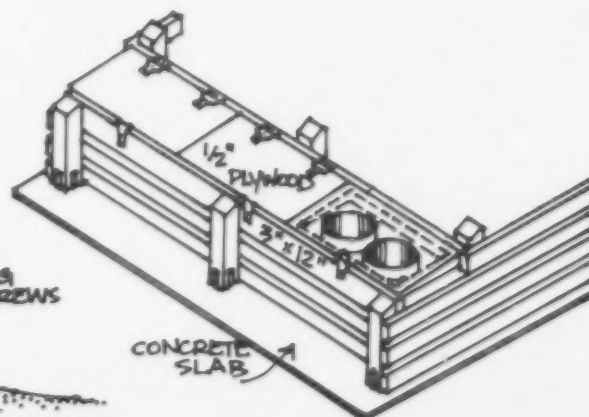
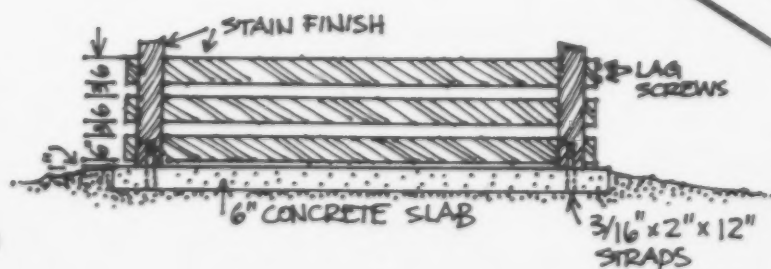
- FIREWOOD HOLDERS SHOULD BE LOCATED FOR USER CONVENIENCE AND EASY RESTOCKING BY PARK STAFF.
- MAIN FIREWOOD STOCKPILES ARE OFTEN LOCKED UP ELSEWHERE.



FIREWOOD HOLDER ON CONCRETE SLAB OR WOOD SLATS.



FIREWOOD SUPPLY AND GARBAGE CONTAINERS CAN BE COMBINED.

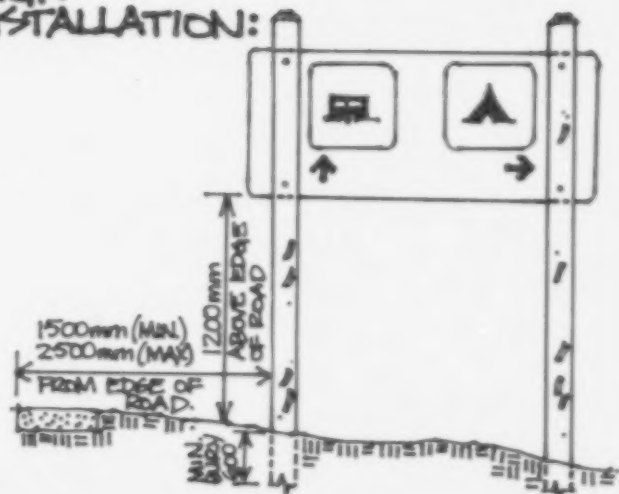


PARK SIGNS

SOME TIPS...

- PARK SIGNS ARE USED TO ORIENT, INFORM AND GUIDE VISITORS.
- ADOPT A STANDARD DESIGN AND STICK WITH IT!
- STANDARD PARK SYMBOLS ARE NOW USED IN MANY COUNTRIES.
- UNIFORMITY IN 'SIGNAGE' HELPS TIE A PARK TOGETHER.

SIGN INSTALLATION:



SOME OF THE MANY INTERNATIONAL PARK SYMBOLS:



GENERAL CAMPING
700 x 600 PR PL
450 x 600 FM



CAMPING STATION
700 x 600 PR PL
450 x 600 FM



BOAT LAUNCH
700 x 600 PR PL
450 x 600 FM



BOAT LAUNCH PARKING
700 x 600 PR PL
450 x 600 FM



SHOWER
700 x 600 PR PL



SWIMMING
700 x 600 PR PL



PLAYGROUND
700 x 600 PR
450 x 600 FM



PICNIC AREA
700 x 600 PR PL
450 x 600 FM



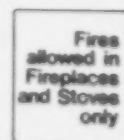
WASHROOM
700 x 600 PR PL
450 x 600 FM



DRINKING WATER - TAP
700 x 600 PR PL
400 x 300 PR PL
230 x 300 FM



FIREWOOD
700 x 600 PR PL
450 x 600 FM



Fires allowed in Fireplaces and Stoves only
700 x 600 PR PL
450 x 600 FM
230 x 300 PR PL

SOME TRAIL SIGNS:



WALKING



HANDICAPPED



HIKING



CROSS COUNTRY SKI



SNOWSHOE



BICYCLE

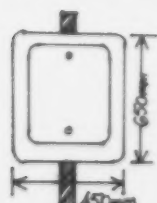


EQUESTRIAN

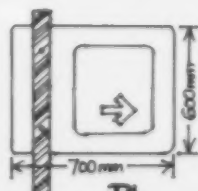


INTERPRETIVE

STANDARD SIGN DIMENSIONS:



FM (FACE MOUNT)



PL (POST LEFT)



Group Use Area
By Reservation only
700 x 600 PR PL
450 x 600 FM



TEXTING PARKING



Handicapped Parking only

Vandalism

Vandalism has been called the *plague of parks*. You can't stop it but you can reduce the chances of it happening. You can also make it easier to fix once it occurs. Get the jump on vandalism by planning for it ahead of time.

Taking precautions in the following five areas can have a real impact on reducing vandalism:

1. Visibility

Vandals are less likely to do their work in the open.

- . Keep clear lines of sight so that open spaces, facilities and building entrances are visible.
- . Where possible, make it easy for visitors, park employees and police to see what's going on without getting out of their vehicles.
- . Orient structures so that they don't become hiding places.
- . Post a sign letting the public know who operates the park and what simple rules should be respected.

2. Access

Make it hard for vandals to get at things.

- . Make roofs hard to reach.
- . Locate lights where they won't be easily broken.
- . Where possible, locate the caretaker's residence or office near the park entrance. Vandals don't like to advertise their presence.

3. Vulnerability

Look tough!

- . Use durable materials properly installed. If it looks fragile, it invites destruction. Glass mirrors are favourite targets. Use metal mirrors instead. And make sure vehicle barrier posts are good and sturdy.
- . Use heavy duty, commercial-type fixtures that will be unattractive to potential thieves who are interested in home use or resale.

4. Visitor Acceptance

Be user friendly.

- . Design truly functional parks that fulfill user needs, encourage smart use and minimize visitor frustration.
- . Design the park so that it is easier to use than to misuse.
- . Make the park and its facilities attractive so that they instill pride and respect.
- . Be a good host! Be friendly and helpful to park visitors.

5. Upkeep

Keep it clean!

- . Use materials that are easy to clean, and keep them that way. Visitors tend to treat and leave the park the way they found it.
- . Make frequent, regular and thorough checks on park conditions, and take quick corrective action. Remember the four R's: repair, repaint, replace and remove.

The best solution to vandalism is to have a park full of happy people.

SOURCES

PUBLICATIONS

Focus Series Manuals. Available free from:

Alberta Recreation and Parks
Recreation Development Division
Outdoor Facilities Section
in Edmonton or through Regional
Recreation Offices

A growing list of useful manuals containing practical, up-to-date information on a wide range of outdoor recreation facilities. See the back cover of this manual for a list of other titles available.

Park Design Series. Available free from:

Alberta Recreation and Parks
Recreation Development Division
Outdoor Facilities Section
in Edmonton or through Regional
Recreation Offices

A set of large format blueprints containing a wealth of useful ideas, methods and designs on how to plan and build various outdoor recreation facilities. Those currently available are:

Campgrounds
Signs
Playgrounds
Landscaping (3 sheets)
Vehicles in Parks
Boat Launches
Trails
Accessibility for the
Handicapped

Alberta Campground Guide (published annually, 64 p.) Available free from:

Alberta Tourism and Small
Business
Travel Alberta
at travel information Centres
throughout Alberta

A very handy guide listing almost every park in the province, including location, type of operator, size, and a description of what is in each park. An excellent way to gain a regional overview of already existing outdoor recreation opportunities. This guide is keyed to the Alberta Highways Map, also available from Travel Alberta. Every province in Canada has the equivalent of these publications.

Alberta Municipal Assistance Programs (published annually, 132p.) Available free from:

Alberta Municipal Affairs
Duplicating Services
4th Floor
9925 - 107 Street
EDMONTON, Alberta
T5K 2H9
Phone: 427-4880

An indispensable guide, the guide, to provincial grants and cost sharing programs for Alberta municipalities, community associations, organizations and other interest groups.

- . Transplanting Alberta Trees and Shrubs (1982, 28p.) This and other useful publications available free from:

Alberta Agriculture
Print Media Branch
9718 - 107 Street
EDMONTON, Alberta
T5K 2C8
(and district offices)
Phone: 427-0391

Consult this booklet if you are thinking about using native stock in park landscaping. It describes the various species, the season for preparation, digging, transporting, transplanting and caring for plants once they have been relocated. Transplanting with a tree spade is also discussed.

- . An Introduction to Alberta Land Titles (1984, 27p.) Baffled by mysterious notations on your land title? This booklet provides a good introduction to land titles, basic surveys, land law and ownership, title searches, and other land related services. It includes a useful glossary and an inside look at the workings of the Land Titles Branch.

Available free from:

Land Titles Branch
J. E. Brownlee Building
10365 - 97 Street
EDMONTON, Alberta
T5J 3W7
Phone: 427-2742

or

J. J. Bowlen Building
620 - 7th Avenue, S.W.
CALGARY, Alberta
T2P 0Y8
Phone: 297-6511

- . Licencing Information (12p.)
Available free from:

Alberta Gaming Commission
5th Floor, South
J. E. Brownlee Building
10365 - 97 Street
EDMONTON, Alberta
T5J 3W7
Phone: 427-9796

Profits from games can be used for park development projects. This booklet describes the types of gaming licences required for fund raising events involving bingos, casinos, raffles and pull-tickets. Guidelines for eligibility and use of the proceeds are listed along with information on how charitable organizations can apply for a gaming licence.

- . For buying maps and air photos:

Maps Alberta
Bureau of Surveying and Mapping
Alberta Forestry
2nd Floor, North Tower
Petroleum Plaza
9945 - 108th Street
EDMONTON, Alberta
T5K 2G6
Phone: 427-7417

or

Room 804
J. J. Bowlen Building
620 - 7th Avenue, S.W.
CALGARY, Alberta
T2P 0Y8
Phone: 297-7389

QUESTIONNAIRE

Please help us keep this manual useful and up-to-date by letting us know what you think of it.

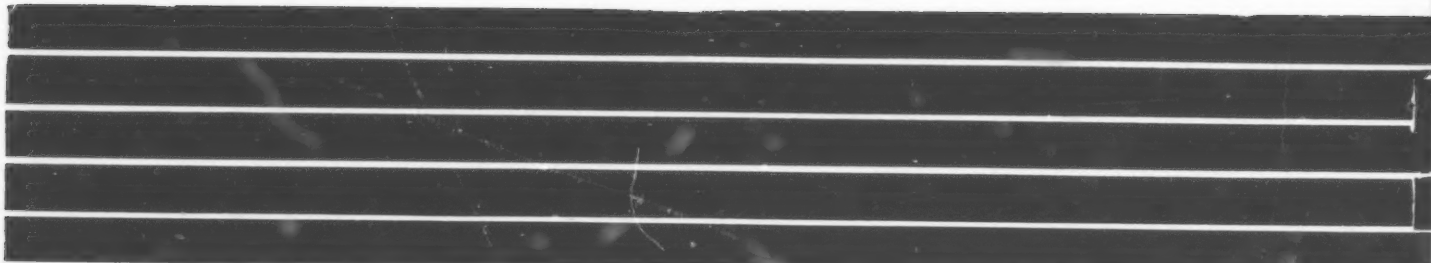
1. Is this manual useful, clearly written and easy to follow?

2. What information should be added to the manual or left out?

3. Other comments would be appreciated.

Thanks for your help. Please mail this page to the Outdoor Recreation Facilities Section address shown on the back cover of this manual.

Thank you.



THE FOCUS SERIES

Information designed to help individuals and groups bring their visions for outdoor recreational facilities into focus is available at no charge.

- 1: PLAY SPACE PLANNING
- 2: PLAY SPACE CONSTRUCTION
- 3: PLAY SPACE MAINTENANCE
- 4: PLAY SPACE SAFETY
- 5: PLAY SPACE IDEAS
- 6: RECREATION TRAILS
- 7: TENNIS COURTS/OUTDOOR RINKS
- 8: DOWNHILL SKI AREA PLANNING
AND OPERATION
- 9: CROSS COUNTRY SKI TRAILS
- 10: BALL DIAMONDS
- 11: PARK DEVELOPMENT

For copies, contact our regional recreation office or:

Outdoor Recreation Facilities Section
Community Recreation Branch
Alberta Recreation and Parks
9th Floor, Standard Life Centre
10405 Jasper Avenue
Edmonton, Alberta
T5J 3N4

Telephone: 427-4471